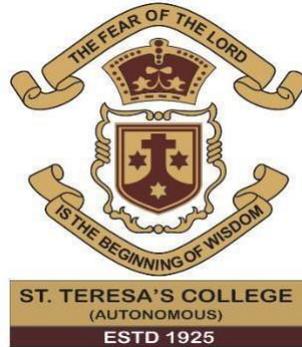


**Historiographic Metafictional Elements in Nathaniel Popkin's
*Everything Is Borrowed***



*Project submitted to St. Teresa's College (Autonomous) in partial fulfilment of
the requirement for the degree of BACHELOR OF ARTS in English Language
and Literature*

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An Abstract of the Project entitled
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Historiographical Metafiction is a kind of postmodern art form. It is the process of rewriting history in a way that it is not previously recorded through a work of fiction. It both sets up and then blurs the line between fiction and history and also suggests that events and facts are distinct. The elements of fact and fantasy recurrently converge together in Popkin in such a way as to give a puzzling confusion to readers. The objective of this research paper is to examine Nathaniel Popkin's *Everything Is borrowed* in order to explore the historiographic metafictional elements dealt in this book. The Book is a multi-layered hybrid of history and fiction. Popkin with his metafictional devices had tried to parallel between the history, the past and the present. It portrays about the history of Jewish activists. The strategy is devised to lead readers to believe that the events in his novels have actually happened. Chapter one outlines a detailed account of theoretical framework used to prove it and the next chapter gives the detailed analysis of the book within the framework of the historiographic metafiction discussed on the previous chapter.

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Introduction

Nathaniel Popkin, the author of *Everything Is Borrowed* is clearly a person who loves Philadelphia, being a citizen of Philadelphia, he brings out a well-researched notes into life. Here the author possess a historian's rigor. He had tried to balance the narrative technique between historical past and his own fictional elements. Being a Philadelphia-based writer, his books reflect his love for Philadelphia. He is also the author of many other works such as *Lion and Leopard*, *Philadelphia: Finding the hidden city*, *Song of the city*, *The Possible city*, *The Year of the return*, *To Reach the spring*. He is also the co-editor of *who will speak for America?*

Popkin had been a close observer of Philadelphia, and this is reflected in all his notable works too. *Everything Is Borrowed* is a hybrid of both the history and fiction. Here he gives the dual narratives of two different people in two different time zones. Nathaniel Popkin is an editor, historian and author of many notable works with a focus on Philadelphia, and it's past. No wonder Morgan Meis (author of *dead people*) had called him a national treasure.

Popkin has blended properly the essence of history and imagination in his novel. Just like his character Nicholas getting delayed of his commission because of his interest in research, Popkin too seems to be caught up in the world of research about this old immigrant who actually lived near his neighbourhood. This led to the connecting of dots from historical past to the present in his novel *Everything Is Borrowed*. Popkin had added many passages from the real as well as Imaginary sources in his novel due to his research.

These are typical situations of every author of historical fiction, where they get too many research history's archives that they fall deep into it, and their contents are rich in historical evidences. He has also tried writing himself into the book. He makes certain appearances as a 'neighbourhood street person'. *Everything Is Borrowed* can be taken as a historical treasure peeling the layers of history about the Cities that were once on the city.

Popkin digs into the city's history and moulded it into a fine piece of writing which includes history and imagination. The voice is gentle and real and evokes the necessity to honour our past. Popkin has skilfully researched the place's history which led to the multi-layered hybrid of history and present. Through the age of demolishing buildings with no thought of past, the author gives us an insight about how the buildings contain stories of people and even about those who built them. Popkin through all his works can be seen having an ability to make the history and fiction parallel to readers.

Popkin gives us an evocative novel of a man who confronts his doppelganger from another era. Popkin intertwines both the past and present from an architect's perspective who is trying to figure out through time his lost love, his griefs, regrets and passage of time. Popkin wrote his novel just like buildings, layering the historical evidence from the past at the top of present day. It smoothly shifts from the present days to the past days. Popkin made his city of Philadelphia much of a character itself.

Just like how the characters in his novel are complex, his city too is impossible to figure out. Popkin made sure of the intersection between different timelines in his story. He weaves perfectly through the time. His readers can understand his ability from other works. His book like Philadelphia: Finding the Hidden city also concerns much about the hidden things to be recovered in the city of Philadelphia, where he weaves in and out of time. Popkin says, the city of Philadelphia can be readable. And just when the architect tries to find the layers of history in his city, he moved on to a path of identifying himself.

Everything Is Borrowed, the title refers to the fact that the town grew with the ‘borrowings from Swedish, English and even Rome cities ‘. Everything Is Borrowed offers the history of a long forgotten and unrecognized Jewish anarchist immigrant who later becomes the President of the Jewish burial society and about how the city can turn itself to a man.

The aim this project is an attempt to analyse Nathaniel Popkin's Everything Is Borrowed along historicist lines including historiographic metafictional elements. The First chapter incorporates the detailed account of theoretical framework and the second chapter discusses how Popkin with his own distinctive metafictional devices, tries to attempt at blurring the division between fact and fiction. The elements of fact and fantasy are intertwined in the novel, it is an expert ability of the author to weave in and out of time in order to make readers believe that the events took place.

Historiographic metafiction frequently shows that they both inscribe and undermine the authority and objectivity of historical sources and explanation by using the paratextual Conventions of historiography.

CHAPTER ONE

The Overview of Historiographic Metafiction

Historiographic metafiction, the term was believed to have been coined by the Canadian literary theorist Linda Hutcheon. Historiographical metafiction is a kind of postmodern art form. Term was coined during the late 1980's. The works of fiction which consists of the literary devices such as metafiction and historical fiction can be referred to as historiographic metafiction. According to Linda Hutcheon in 'A poetics of postmodernism', works of historiographic metafiction are "those well - known and popular novels which are both intensely self-reflexive and yet paradoxically also lay claim to historical events and personages". It is the process of rewriting history in a way that it is not previously recorded through a work of fiction. It is a form of postmodern art, based on textual play, parody and historical conceptualization. It is a "quintessentially postmodern art form" (a poetics of postmodernism). It rejects showing the beliefs that we have now about a past event and considers focusing on individual past events in a specific manner that has not been recorded before.

It is often said that the history cannot be claimed as truthful representation of past events. It can always be interpreted through several ways. History itself is a fictionalized narrative. Therefore, in historiographical metafiction the history is subjected to critical analysis. It uses new technique of parody by incorporating the past into the present. This theory instals the fiction - history line and then blurs it. It also points to a difference between events and facts that many historians share.

Our historical knowledge is semantically conveyed which has once existed in the past. Since the documentation becomes signs of events that the historian transmutes into facts, such as historiographic metafiction. This theory shows how, using the paratextual conventions of history, the authority and objectivity of historical sources and explanations can be recorded and undermined. Understanding the past appears to be a universal human need, and telling of history has emerged independently in civilizations around the world

The term historiographic metafiction has two terms metafiction and historical fiction. Metafiction is basically a fictional work, but when you read a metafictional literary work you understand that we actually read a fiction and whatever you see on the stage in theatre or whatever you read or listen even is not real and to understand that the author of the work is giving us some messages maybe in theatre or the stage or when we just read it, the author gives us some message that the reader or the audience , whatever we watch or read is not based on the real story , so that is meta fiction. If we have a message from the writer that makes us aware that whatever we watch or read is not real is a fictional work, that is metafiction . The metafiction makes us understand the relationship between life and art, the relationship between reality and literature . Basically, writers want to have metafiction in their literary work because they want us to criticize, they want the readers and viewers to criticize the situation ,they don't want to be lost in their emotions because when we are lost in ones emotions, we lose our ability to criticize, we act without thinking.

But when we are able to criticize, we are able to do it logically without any emotions so that is basically writers try to make their readers understand that criticizing things is very important. Metafiction itself has started to become popular in the last 20th century especially in the time of postmodernism, however if you go back to the history the contemporaries by Chaucer was also a metafiction and Don Quixote and so on so more. We see metafiction in these literary works however they were not that obvious, but in the 20th century that became very obvious in literary works.

Historical fiction is also considered as Roman fiction and it was pointed out by Walter Scott. The idea of historical fiction is that we basically need to have a history and we have to put the characters in a certain historical period. Everything could be in a certain historical period, but whatever we write is again based on no truth, there is nothing real, everything is fictional. Now we say historiographic metafiction is a fiction based on no reality and some messages that whatever you watch or read is not based on reality, that also you have historical characters or historical figures in your story. Basically, we have a real-life characters in a certain historical period. So historical metafiction is the combination of historical fiction and metafiction.

A novel that is a historiographic metafiction obviously will be incorporating in its storytelling a historical event, it will sometimes rewrite the whole event from the point of view of characters or give us opinions of the historical event through different perspectives in the process. The historiographic metafiction also presupposes this idea that history itself is textual and when you

incorporate it in a novel we are looking for that historical event from the point of view of today but rather you are within that time frame but only recording it or asserting it or writing about it maybe within that time frame. The person whom we know historically but its understanding of his life and character within his own timeframe all the other characters whom we know through historical recording are also characters in the novel, but we learn them within the context of history itself but only as a fictional work. So historiographic metafiction will sometimes incorporate history but tell like a story in its own time.

Some times it might create a story different from what we know but what it emphasizes throughout will be the history itself .We know of it because someone recorded it and a fictional account of it then maybe is another accounting of the same history , the only distinction to be made here is that most of the times the history that is incorporated in a postmodern novel is incorporated within its own time frame and represented within its own time frame in the current knowledge of that the history or current opinions are usually bracketed out, sometimes it can also be a parody where our novelists can include a historical event and a figure in it and it's a parody of the actual whatever recorded history. As per Hutcheon (1988:120) the historiographic meta fiction shows about the historical conditions and that history can be structured and debated.

Well according to Linda Hutcheon, a work of historiographic metafiction incorporates history within it which sometimes points to its historiographic nature and tells that historical event within the logic of that historical event itself and not as effect or not as an alternative history, but as a

history seen from the point of view of the present.

CHAPTER TWO

Analysis of the Book *Everything Is Borrowed*

Everything Is borrowed by Nathaniel Popkin is a multi-layered hybrid of history and fiction. The novel begins with the protagonist, that is Nicholas Moskowitz, who as we can see is a young architect. He lives at Philadelphia and that's where the story evolves. He has got a new commission of a parking lot. To his surprise that was his neighbourhood some twenty years earlier. Nicholas in spite of deadline visits his site and notices that many buildings and other shops have disappeared since urban renewal. He is haunted by the past as he pays visit to where he once lived and mourns about buildings as well as his lover. Now he can see that he is so caught up with the past that he visits the library and began researching about the site than paying attention to his commission. During his research, he discovers about a person named Moskowitz who lived there, who was a Jew activist, who was accused of anarchy. He sinks into the past of the other Moskowitz's life.

He learns more about the previous Moskowitz who had made many protests including the one on Yom Kippur and for that he had faced jail. As he gets to know more about the other Moskowitz, he at the same time thinks about his own past life, as if both the past life of two persons is integrated. He thinks about his own relationships and friendships. He understood that the previous Moskowitz and his experiences are interrelated to that place and delays the commission, procrastinating it forever. The client and his associate Nadia are worried of him. At times Nadia finds him so indulged with the past of the other Moskowitz, that she even doubts that he is someone Nicholas knew. Finally, Nicholas reads that the Jew

activist became a leader in the same Jewish community. And also, he apologises to the client that he can't do this commission and then he wanted to find more about the afterlife of other Moskowitz and finds his tomb at the Holy Burial Society which he found.

He was transformed to be the president of this Jewish society. On the other hand, we see that at present Nicolas is reunited with Eva, which left us in confusion with the attraction Nicolas had in Nadia his associate. Popkin once said in an interview with grant clouser that the novel is a formal experiment, combining the 'Historical past' and 'recent past' in the 'present tense'. We indeed see this in the beginning of novel where the parking lot reminds Nicolas of his own memories from years ago, the starting chapters of the novel is as a reviewer has said 'original story of a man trying to find himself in time'. Popkin developed the historical story through Nicolas, where the architect gave no importance to the "Human centered design", which helped in the parallel of historical past to the present. Just like how Nicolas figures out the story of anarchist Moskowitz, Popkin has said that he too had found the story on the history book by Harry Boonin. He had said that 'reading the passage was one of the seeds of this book'. Here in the novel too he gives the reference to Nicholas coming across the Harry Boonin's book:

“Boonin's book, like a half-eaten pear, is still open to a photograph of the Washington Market. I flip back and then forward a page or two. After a moment, I trip on "Moskovitz." Moskovitz almost exactly like me. But not only Moskovitz, Moskovitz of Bainbridge Street, the same part of the street, in the same neighborhood, as Terzian's parking lot: "Moskovitz, an anarchist, had a stand opposite the synagogue at 322 Bainbridge Street “(Popkin, ch 6).

Popkin had incredibly tried by using his metafictional devices in order to parallel between the history and the past. Even author Popkin had done a lot of research to incorporate the story of Moskowitz who carried out the Yom Kippur protest to his fictional architect character, ‘whose own issues found resonance with the anarchist Moskowitz’s ‘.

“The sun is high in the sky. Louis Moskovitz must have walked here too, perhaps contemplating what he did. Perhaps hungry or tired or overworked. When he turns to religion, which synagogue does he attend? Perhaps this one, with its handsome baroque form”(Popkin, ch 9).

Popkin had used this passage to show his character Nicholas getting indulged in the life of other Moskovitz and ‘draws deeper into the rabbit hole of history, as well as the rabbit hole of his own life ‘. In other words, Nicholas gets in the shoes of another Moskovitz. And what he might have thought years ago at exact spot where Nicholas is standing. Throughout the novel there are also instances where Nicholas reads about the book of Harry Boonin:

“Morris Rittenberg, a tailor, hosts the first meetings of the atheists in the Jewish quarter, says Boonin, the historian. As I start reading again on Monday morning, I text Nadia to say I'll be in late. She doesn't respond”(Popkin, ch 11).

He is constantly referring to the book in the novel. Popkin had himself researched it thoroughly. Popkin easily shows through the example of Weinberg, that the history can split us into two or that history can condense us into one (About the difference in the spelling of Moskovitz and also the confusion between two people from past Louis Jacobs and Julius Moskowitz). Popkin through his thorough research on the story of Jewish anarchist tries to figure out the history as it is. He with his years of researching on this had formed the idea about how the spelling, occupation, family name kept on changing when each historians recorded them.

Popkin found his answers by the end of the novel. The character of the architect that Popkin created was too indulged about the past of other Moskowitz, that when Nadia, his associative asks if he was a relative to which Nicholas answers that the “He tries to tear things down...And then, I think, he figured out how to build them up”. Popkin at this stage wants to Convey the relation which led architect Nicholas, to find himself in the life of other Moskowitz who lived many years ago. Popkin align Eva his (Nicholas) lost love with the real comrade Natasha notkin of old times. He develops fictional characters that match with the historical ones. Just like that of Nicholas and Julius Moskowitz. Popkin made such a character whose issues find resonance with the anarchist Moskowitz’s that it had occurred to him that he might be, related to the Julius Moskowitz through bloodlines.

Popkin through this wants to show that the anarchists tear down whereas the architects build up. And that is when he found his fictional character for his story.

Popkin had said in an interview with Grant Clauser that he had taken notes of the history and waited for the perfect fictional character to fit in.

“History is like a mirror.

It allows us to reflect on ourselves. Before the mirror-_-before the discovery of a still pond or puddle-_you can't reflect. You can only grub forward. Before history there is only today and tomorrow. Tomorrow presses on today. It's the reason for today. History, once it's discovered, presses back. It demands something of today- either forget it or duplicate it” (Popkin, ch 35).

Popkin also tries to interpret the history of the Jewish Moskowitz, by wondering how he must have thought about the prisoner life, about his own children's and about his comrades. Nicholas also goes back to the 49th street where he used to live in his college days with Eva, as the digging into the past life of Julius Moskowitz have brought him to the search for his own lost truth and himself. By the ending chapters of the novel, Popkin who has done goo research on the Jewish anarchist, gives every single account of his life through his character Nicholas.

Minnie and Moskowitz married at seventeen in 1881. Then the May laws came into effect, which made Jews disconnect from urban life. Therefore, Julius fled to us in 1888 with wife and children. After leaving prison in 1892, he did various occupations. Popkin accumulates all these information from the US Census 1900. Popkin also gives us an insight about the history of Voltairine, written by the historian Paul Avrich in his 'An American Anarchist'. Along with the Jewish anarchist to turns to the president of the independent cheura kadisho in Philadelphia, it was mainly for burial grounds for people without regard to the country of origin. Popkin anyhow uses the Harry Boonin's book as 'historical atlas', he calls so because Of his organization according to the streets. Popkin also adds that the critique of the novel is that it goes 'deep into history'.

Conclusion

History can be interpreted in many ways. it can be twisted around, falsely recorded and it need not necessarily be true always. Philadelphia is one the largest city and it is notable for its rich history. One the places with rich 'historic sites, centuries-old neighbourhoods and museums'. The novel Everything is borrowed also revolves around the rich histories steeped in the neighbourhoods of Philadelphia.

In the foregoing chapters, an attempt has been made to analyze Nathaniel Popkin 's Everything Is Borrowed along new historicist lines. The Book was multi-layered hybrid of history and fiction. Popkin has tried his best to incorporate both fiction and history parallel to each other. Due to this the book can be analyzed through the new historicist lines. The Novel provides a very detailed plot about how the protagonist, that is Nicholas Moskowitz and his doppelganger from past era make path way for the histories steeped into the cities of Philadelphia to be discovered. Nathaniel Popkin through his work had portrayed his immense love for the city and its past.

All of his notable works reflects his love for the city of Philadelphia and about its rich history. Popkin , through this novel too shows usabout the depth of knowledge and curiosity that he has got for the city . This work can be analyzed in both historical and metafictional ways. Author focused upon showing the rich histories of the city through his fictional character Moskowitz, who reflects a part of himself. Popkin is a Philadelphia based writer, all of his possible works has depicted something related to this city.

He's successful to parallel between both history and his own fictional elements, which has made him the national treasure. Popkin made us understand about the buildings, which contains stories and has a long history to talk about. Popkin also succeeded in weaving through time. He smoothly shifts from past to present.

The Aim of this project of attempting to analyze Popkin's *Everything is Borrowed* along Historicist lines was achieved by his parallel writing through historical past and fictional elements. Popkin had succeeded in blurring between fact and fiction. The novel begins with our protagonist, Moskowitz digging the past of his neighbourhood rather than completing his commission. The past life of the two persons from different timelines seems to be integrated.

Works Cited

Campbell, Ellen Prentiss. "Everything Is Borrowed, by Nathaniel Popkin." *Fiction Writers Review*, 5 June 2018.

Clauser, Grant. "A Conversation with Nathaniel Popkin Author of Everything Is Borrowed and & nbsp; Grant Clauser & nbsp;." *Cleaver Magazine*, 7 Feb. 2019.

Fleischer, Jeff. "Review of Everything Is Borrowed." *Foreword Reviews: Book Reviews and Coverage of Indie Publishers*, Foreword Reviews, 27 Apr. 2018.

Hutcheon, Linda. *A Poetics of Postmodernism: History, Theory, Fiction*.
1988, New York

Jackson, By: Jared. "The Pen Ten: An Interview with Nathaniel Popkin." PEN America,
5 Jan. 2021.

POPKIN, NATHANIEL. EVERYTHING IS BORROWED. E-book ed., New Door Books
(9 May 2018), 2018. Kindle.

Popkin, Nathaniel. "Nathaniel Popkin: Everything Is Borrowed." *Main Point Books*,
16 May 2018.

Sobel, Jon. "Book Review: 'Everything Is Borrowed' – a Novel by Nathaniel Popkin."

Blogcritics, 23 Apr. 2018

Timpane, John. "Nathaniel Popkin Is a Philly Author with a Rare Double Play: Two New

Books at Once." *Inquirer*, The Philadelphia Inquirer, 11 July 2018.

FACTORS AFFECTING BRAND LOYALTY WITH REFERENCE TO FAST FOOD RESTAURANTS

Project report

Submitted by

RAECHEL SUNIL (Reg. No. SB19BMS020)

Under the guidance of

Mrs. NAMITHA PETER

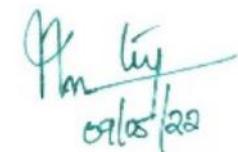
In partial fulfilment of the requirements for award of the degree of
Bachelor of Management Studies (International Business)



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CERTIFICATE

This is to certify that the project report entitled, “Factors affecting brand loyalty with reference to fast food restaurants”, has been successfully completed by Ms. Raechel Sunil, Reg. No.SB19BMS020, in partial fulfilment of the requirements for the award of the degree of Bachelor of Management Studies in International Business, under my guidance during the academic years 2019-2022.

Date: 09-05-2022



Mrs. NAMITHA PETER
INTERNAL FACULTY GUIDE

DECLARATION

I, Raechel Sunil, Reg. No.SB19BMS020, hereby declare that this project work entitled, “Factors affecting brand loyalty with reference to fast food restaurants” is my original work.

I further declare that this report is based on the information collected by me and has not previously been submitted to any other university or academic body.

Date: 09.05.2022


RAECHEL SUNIL
Reg. No.SB19BMS020

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I take this opportunity to express my deep sense of gratitude and whole hearted thanks to Mrs. Megha Mary Michael, HOD of the department of Management Studies and Mrs. Namitha Peter for guiding me in all stages of this project, without whom this project would have been a distant reality. Their valuable comments and insights have greatly benefitted me and helped me complete the project successfully.

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Raechel Sunil

EXECUTIVE SUMMARY

This report presents the factors affecting brand loyalty with reference to fast food restaurants.

The loyalty of a brand is a pure relationship between a customer and a brand. The major objective of any marketing strategy for most product/ service categories is the facilitation of consumers to repurchase the brand through preference or involvement. This is based on the past behaviour and the brand loyal consumer's likely purchase of the products of a specific brand currently and in the future.

Through this study, the researcher has attempted to identify the factors that are responsible for creating brand loyalty among customers with reference to fast food restaurants. The researcher has also attempted to analyse the relationship between customer satisfaction, trust and brand loyalty. The researcher used convenience sampling for the study using questionnaires which was mainly carried out on the customers of the fast-food restaurants.

The report starts with an objective, a brief history of the fast-food industry, and covers a wide variety of topics, such as the various factors responsible, relationship between the variables and brand loyalty, etc.

The primary objective of this study was to understand the several factors such as timeliness, pricing, brand name, quality, etc and the relationship between these factors and how it helps in creating brand loyalty among the customers of the fast-food restaurants.

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CHAPTER 1
INTRODUCTION

1.1 An Introduction To Study

It is becoming increasingly important for brands to make sure that they are competitive in every possible way. Today everything is branded in order to make it easier for customers to purchase products that they will appreciate, find useful and of course be able to identify and come back to. If a brand is competitive and consumers see value in the brand, they will most likely repurchase it. We know a big portion of input provided for a pure relationship between a customer and a brand is a brand experience.

To have consumers that are loyal towards your brand is something that every brand should prioritize, since those customers are a great source of possible income. Getting customers involved with a brand is a way to create brand loyalty. The central premise in research is that the more involved a consumer is with a brand, the more loyal the consumer will be towards the brand. Brand loyalty is important for marketers because it helps in retaining customers and often require less marketing resources than acquiring new ones.

The fast-food industry is on an upward trend. The demand for fast-food product is now growing as it is convenience which suits the lifestyle of customers. With the changing lifestyle of consumers, more educated people and affluent people tend to eating out especially in fast food restaurants. Along with the heavily promote through media and information technology exposure, customers have variety choice of fast-food pattern and restaurants.

It is a consumer-defined concept as it is consumers that respond and be involved with products. It is a consumer's ongoing commitment in the form of feelings, thoughts and behavioural response towards products. The involved consumers will have stronger reactions when exposed to a certain product, such as in advertising.

Brand loyalty by any customer not only represent the repeat purchase of the brand but sometimes it also refers to the psychological commitment of that customer towards that brand, which means that the customers will not purchase that brand most often but also, he or she will refuse to purchase any other brand of same or better quality as compared to the old one he or she is loyal to. Brand loyalty has great trust on brand effect in several variables like customer perceived quality, perceived brand trust, brand experience, customer brand relationship, etc. The purchase behaviour of consumers is greatly influenced by increasing competition reflected in the rapid increase of brands in the fast-food categories, and in the consumer's thirst to variety. It is therefore important to understand factors influencing brand loyalty of consumers so that marketers can accordingly formulate the marketing mix of their brands to target appropriate segments. Product packaging, price, store location, rewards, promotions, perceived quality, brand name, customer service, etc are some key differentiating factors influencing the behaviour of repeat purchasers and brand switchers. Consumer's demographic characteristics like age, occupation is also associated with high levels of brand loyalty. Through this research, it was also found that brand loyal consumers are more concerned with quality than price.

1.2 Statement of Problem

The overall performance of the company is influenced by crucial and essential factors such as creation of the brand loyalty and the retention of the customers. Brand loyalty is important for the managers so that they can improve to retain the customers and in turn have a favorable impact on the overall profits. This research is conducted to analyze the band and width of brand loyalty from the customer's point of view in the fast-food industry.

1.3 Literature Review

1.3.1 Brand loyalty

To have consumers that are loyal towards your brand is something that every brand should prioritize, since those customers are a great source of possible income (Roy,2011). Jacoby and Kyner (1973) describe brand loyalty as different factors for a customer to engage in, those are the buying decisions has to be nonrandom, expressed over a time, a behavioral response, occur decision making unit, conscious choose the brand even though it exists brands who offer similar products, and it have to be a psychological evaluation process. Managers must try to identify these customers, which often have similar tendencies among each other (Hanzaee et al, 2011).

Brand means the symbol, sign and name of the product. In the changing world brands have become more important for the purchasing. Brand selection is critical decision for the customers. Companies try to enhance the image of the brand and this image increase the loyalty of the brand.

More brand loyalty leads to repurchase behavior of the consumer. Various researchers defined brand loyalty in different ways. Relationship theory of brand suggests that, brand is a tool that connects customers and suppliers to the firm and is a mean to sustain such relationship in long run (Davis, Oliver and Brodie, 2000; Chang & Chieng, 2006). Brand affects and helps customers to choose a good brand that satisfies their needs and wants and to choose the right product and firm for any specific or given product or service.

Getting customers involved with a brand is a way to create brand loyalty (Jacoby and Kyner, 1973). The central premise in research is that the more involves a consumer is with a brand, the more loyal the consumer will be towards the brand (Quester and Lim,2003).

There is a rich amount of work done by marketers on building and maintaining brand loyalty and how to develop that loyalty at the passage of time more efficiently and effectively that firm and customers both behave loyal toward each other (Schultz and Bailey, 2000). Several researchers argued and suggests to marketers and firms that brand loyalty should be considered as a fact that consumers build their relationship with any specific brand as they make relationship with one another in personal lives, because brand loyalty is one of the

important and major objectives for businesses and firms to achieve competitive advantage over rivals and competitors and to get profitable outcomes in long term (Wernerfelt, 1991; Chow and Hoden, 1997; Holfman et al, 1998; Fournier, 1998; Grossman, 1998; Munize and O'Guinn, 2001; Young et al, 2010). The more any brand valued strongly means that firm will create more extended value of that brand globally to consumers, by differentiating their brands either the goods or services more valued than those of their competitors (Aaker, 1991; Kotler, 1996).

Numerous researchers believed that antecedents of brand loyalty are dynamic and complex in nature that evolves over time with the changing needs of customers (Johnson, Herrmann and Huber, 2006).

1.3.2 Fast food industry and brand loyalty

Fast food industry is a fast-growing industry that is rapidly changing customer eating habits. This rapid growth of fast food witnesses the increase in income level of middle-class consumers in this world and developing countries, changing eating needs of young and adults and the rising and penetration of multi- national food chains in these countries. In business sector relationship with customers and suppliers is becoming highly important as well as accountability and decision making is becoming more crucial. Behavioral loyalty causes the attitudinal loyalty which further causes the brand loyalty.

Study of consumers' attitude is important for the measurement of the impact on the purchase behavior. The distribution decision of the company is also valuable element, it can differentiate a company from the other one. It is very important to provide the product to the consumer at a convenient place. Research conducted by Lin and Chang (2003) found that the distribution channel convenience of the brands had significant impact on the buying behavior of the consumer.

Promotion is another important element which includes the advertising activities, personal selling appeals, public relation. Companies built the strong relation with consumers through different promotional appeals like Cash Discounts, Rebates, and other benefits. These activities are helping the company to enhance the loyalty of the brand. Through personal selling companies promote the products and their service and this effort of the company increases the purchase intention of the consumer and positive attitude towards the product as well as the image of the organization (To and Leung, 2001).

1.3.3 Brand Name

Brands were used to indicate quality and origin in the seventeenth and eighteenth centuries. The brand name is a product, service, etc. of the manufacturer. It is the name it uses to indicate. The brand name is a term used to identify a particular category of company, service, or product in trade. The brand name is a very important option because sometimes it captures the main theme or the link of the product very intensely and reasonably. The brand name is what provides a lot of information about a product and gives a series of information about the product and tells the potential customer or buyer what the product means. (Alamgir, Nasir, Shamsuddoha, & Nedelea, 2010). Brand name is an important attribute of brand loyalty that is sometimes used synonymously with the identity or image of the product. Brand name is central to capture the association of product and the customer in a very reasonable fashion, and is a successful means of communication to give positive image of that product to the customers.

Brand name should be unique and easy to remember that will attract customer and give an insight to the reputation of companies in market with reference to their names (Keller, 2008). The brand name distinct product of companies than that of the rivals and give competitive advantage over competitors (Zeugner-Roth, et al, 2008).

1.3.4 Location

Studies have indicated that differences in demographic variables influence consumer brand loyalty, thus demographic considerations are the most fundamental research variable in any study of brand loyalty or consumer purchasing behaviour. Restaurant location is an important feature of the restaurant that affects customer behaviour and satisfaction (Hyun, 2010).

Location gives brands an understanding of overall patterns of movement, shopping habits and frequency of visits. Having this understanding allows you to create personalized experiences, offers and promotions that tailor to individual customers' needs and interests. Personalization can then lead to higher loyalty levels.

1.3.5. Quality

Food quality plays a central role in the restaurant industry. It is essential to satisfy consumer needs. Food quality is a substantial condition to fulfil the needs and expectations of the consumer. Food quality is acknowledged as a basic component of the restaurant's overall experience. It is a restaurant selection's most important factor, and it is considerably related to customer satisfaction. Food quality affects customer loyalty, and customer assesses the restaurant on the basis of food quality.

Food quality entails food taste, presentation, temperature, freshness, nutrition, and menu variety. Food quality influences customers' decisions to revisit the restaurant.

The product quality covers the features, aesthetics and characteristics of a product or service that allows satisfying definite or inferred needs of customers. According to Russel and Taylor (2006), product quality is the fitness of use of the conformance to the requirement of customers. Quality is how the product offered by the fast-food restaurant satisfy customer needs as physical quality of product and how such particular product apparently communicate that brand image to build brand loyalty (Bitner, 1992; Booms and Bitner, 1982; Tsaur, Chang and Yen, 2002).

1.3.6 Rewards

Keeping customers close to your brand, employees and services is a great way to keep them as your customers for the long term. As well as building brand loyalty, there are also ways to reward your loyal customers and clients to help keep them on your side and coming back for more. Customers want some consideration for continuing to do business with you, especially when they have other options. Offering savings, bonuses, and other forms of special attention to your loyal customers can not only keep them from going elsewhere but may be the reason they recommend you to their friends. Exclusivity is always positively received. This why organisations have always tried to offer new customers exclusive discounts; because those prospects are more likely to buy.

1.3.7 Price

The speedy administration restaurant industry was outlined around the thought of giving quick and accommodation feasting encounters at a moderately minimal price. Selection of a fast-food outlet depends upon price value. The genre of restaurant is judged by consumers through food selling price; with the view that a costly restaurant will provide a better quality of both service and food (Woods and Muller, 1994). Different researchers have demonstrated price as client's first choice (Kara,1995), (Park, 2004), (Andaleeb, 2006), (Tse, 2001)- (Palazon, 2009). It is a well-known reality that cost and quality are two significant elements of value. They both accelerate client gratification and client upkeep, which help increment the benefits of any business. So, for a chief of fast-food restaurant, it is significant to know customers discernment of value and price. When clients are persuaded that they are getting the best quality product or service, they will have a tendency to improve reliability to it in the long run.

1.3.8 Timeliness

Quickness and promptness are everything for an organization as well as customers, particularly when a customer is asking for something that is time sensitive. A fast response to your customers will make them feel contented and will recommend your brand to others without any hesitation.

1.3.9 Packaging

Long before the customer has experienced the delights of your product, they will have either bought into your packaging or not. Unfortunately, if the customers do not like how you package your products, they will then never get to experience your product to the fullest, no matter how great or innovative it might be. Packaging is in reality the first step by which you win a customer on to your side. In a highly competitive world, packaging helps establish your brand and help it stand out from the rest.

1.3.10 Customer service

Service are intangibles, they can't be measured, tallied and stocked. In spite of the fact that restaurants give nourishment, they additionally furnish intangibles, for example the promptness and the dependability of delivery. Affections, mentality, desires and observations come to be more essential in administrations.

Service quality is reflected in a shopper's evaluative recognition of an experience of service received (Cronin & Taylor, 1994). Zeithaml and Bitner (2000) recommended that buyers judge the nature of the service dependent upon their observations of the specialized result furnished and by the procedure by which the conclusion is conveyed and also by the nature of the physical surroundings where the service are provided. Exceptional execution on these perspectives might bring about remarkably discerned service quality for the organization.

Service quality has likewise been connected with client reliability. While a few analysts have reported that there is a lesser effect of service quality than customer loyalty on buy plans (Cronin and Taylor, 1992), there are few others who gave firm meticulous validation supporting the idea that service quality builds client expectations to stay with an organization. It's been further evaluated that superior service standard of fast-food administration results in enhanced recurring sales, which prompts client reliability.

1.3.11 Brand Trust

Trust of a customer on brand trust leads to brand loyalty that create commitment and association of that customer with that brand which then creates highly valued exchange relationships. Commitment with brand by customer is a continuous and enduring expected desire that company wants to maintain. Therefore, commitment of loyalty of customer that results from the brand trust is very important to continuously maintain. According to Curran et al, 2003 brand trust creates brand satisfaction.

1.4 Significance of Study

Brand loyalty is paramount in today's highly competitive world. It is through brand loyalty various companies stay afloat and prosper. Conducting this study will help the brand in understanding the importance of the various factors in creating brand loyalty. It will also help the brand to get an insight on what can be done to have a positive effect on brand repurchase.

1.5 Scope of Study

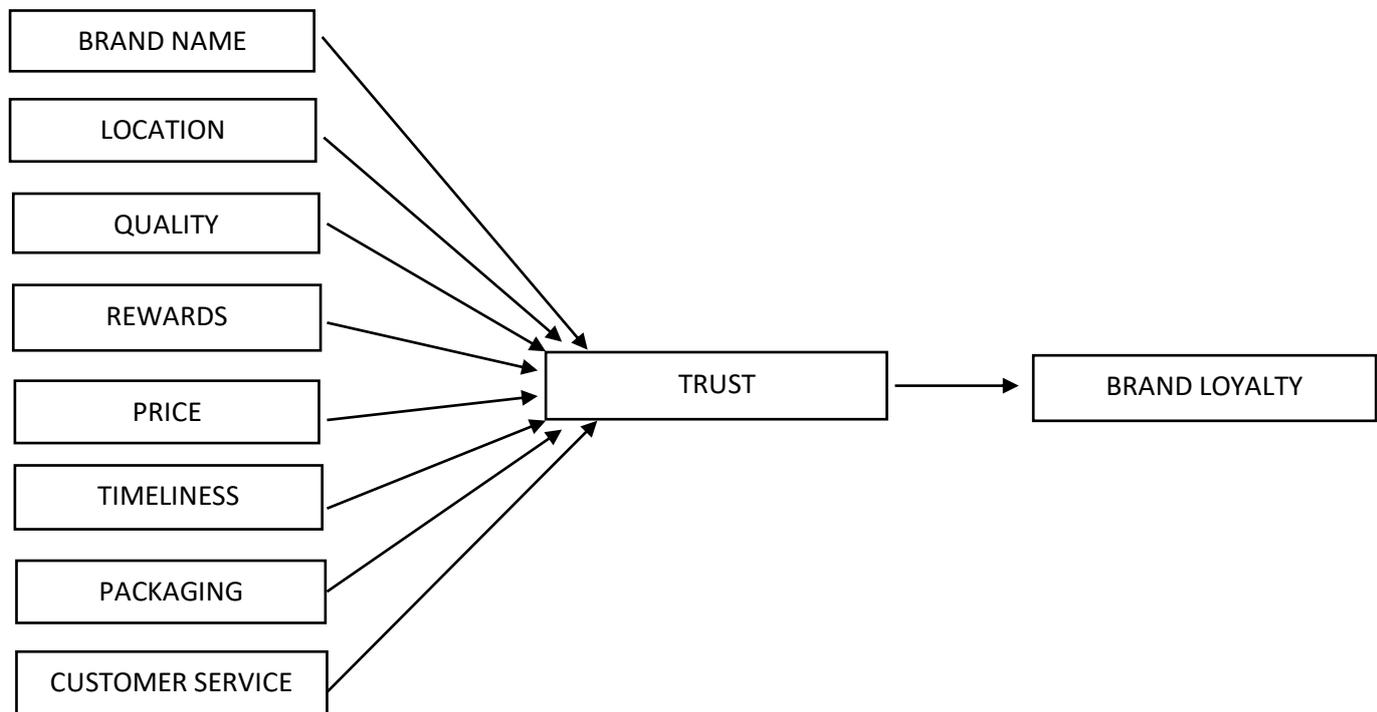
The study will be conducted in Kochi city with several fast-food restaurants. The researcher hopes to collect data from almost 150 customers to measure out

customer's perception and to identify the factors that are responsible for creating brand loyalty.

1.6 Objectives of Study

1. To analyze different variables that play a crucial role among customers in selecting and using products such as fast foods.
2. To understand the influence of demographic variables on purchase intention from fast food restaurants.
3. To identify the factors that are responsible for creating brand loyalty among customers and to investigate the impact of those factors on brand loyalty.

1.7 Development of Conceptual Model



1.8 Research Hypothesis

Hypothesis 1 (H1): There is a positive relationship between brand name and brand loyalty.

Hypothesis 2 (H2): There is a positive relationship between location and brand loyalty.

Hypothesis 3 (H3): There is a positive relationship between quality and brand loyalty.

Hypothesis 4 (H4): There is a positive relationship between rewards and brand loyalty.

Hypothesis 5 (H5): There is a positive relationship between price and brand loyalty.

Hypotheses 6 (H6): There is a positive relationship between timeliness and brand loyalty.

Hypothesis 7 (H7): There is a positive relationship between packaging and brand loyalty.

Hypothesis 8 (H8): There is a positive relationship between customer service and brand loyalty.

Hypothesis 9 (H9): There is a positive relationship between occupation of respondents and factors that influence.

1.9 Research Methodology

1.9.1 Data Collection

Data sources can be categorized as either primary or secondary. Primary data is data collected by the researcher personally for the specific research problem at hand while secondary data is data collected from previous research. Data gathered directly from people in the form of interviews, for example, is considered as primary data.

This research is a quantitative type of research i.e., quantitatively analysing the data is an efficient research approach. Questionnaires are used to collect information from a large number of people in a short time. So, in this research, data was collected through a survey questionnaire designed to be answered by customers of fast-food restaurants.

1.9.2 Sampling

1.9.2.1 Population

Population is the collection of the elements which has some or the other characteristics in common. The number of elements in the population is the size of the population. In this survey, the population comprises of the customers of fast-food restaurants in Kerala.

1.9.2.2 Sample size

The sample for the research is confined to fast food restaurants in Kerala. Keeping in view the limitation of time and resources, the sample size taken is 130 respondents. Questionnaires were distributed through social media platforms like WhatsApp and Instagram to the respondents and enough time was given to the respondents to fill the questionnaire to reduce sampling error.

1.9.2.3 Sampling Technique

There are two mainly two types of sampling techniques – Probability sampling techniques and non-probability sampling techniques. Probability sampling means that every item in the population has an equal chance of being included in sample. Probability or random sampling has the greatest freedom from bias but may represent the costliest sample in terms of time and energy for a given level of sampling error. The various types of probability sampling techniques are simple random sampling, systematic sampling, stratified random sampling, cluster sampling and multi-stage sampling. Non probability sampling is often associated with case study research design and qualitative research. A sample of participants or cases does not need to be representative, or random, but a clear rationale is needed for the inclusion of

some cases or individuals rather than others. The various types of non-probability sampling include convenience sampling, purposive/ judgemental sampling, quota sampling and snowball sampling. The researcher has used convenience sampling technique which is a type of non-probability sampling technique to collect data on time and to avoid low response rate. It involves selecting participants because they are often readily and easily available.

1.9.3 Tools Used for Data collection

The questionnaire is carefully designed to meet the requirements of the research. The questionnaire consists of two parts. The first part is focused on the demographic aspects of the respondents and includes nominal scale questions and ratio scale questions and the second part focuses upon various factors influencing brand loyalty. Most of the questions in the second section is constructed using the Likert Scale, ranging between 1-Strongly agree; 2-Agree; 3-Neutral; 4-Disagree; 5-Strongly disagree.

1.9.4 Data Analysis Techniques

The entire data has been analysed using SPSS software package. The tools used for analysis in SPSS for this research are as follows-

- i. Independent Samples T-Test
- ii. One-way Anova

1.10 Limitations of the Study

- Time constraints were one of the major limitations as research activities were done alongside academic activities.
- Cost was another limitation of the study.
- Many respondents, were reluctant to take the survey and share any information.
- The sample size is very small and has only a very small proportion of the entire population.
- The major constraint was that the findings are based on the assumptions that the respondent have given correct responses.

CHAPTER TWO
INDUSTRY PROFILE

2.1 Industry Profile

The Food Industry has changed and developed over the decades in order to satisfy customer needs and consumer behaviour. This industry is characterized by a complex system of activities concerning supply, consumption and delivery of food products across the entire globe. The market of food has constantly enjoyed some sort of core purpose in the existence of humans, towns, vicinities, communication and tradition as well. Fast food can be meals that are prepared and served swiftly in outlets which are commonly referred to as fast-food outlets. It is an industry that generates billions of dollars which is constantly flourishing rapidly world over. The fast-food industry consists and accounts for prepared food usually from a restaurant, store, food truck, or street vendor, served quickly and affordably to consumers in a take-out, disposable container. Numerous fast-food restaurants have become franchises to which standardized foodstuff are usually transported to core locations to help maintain the same quality standard. Most fast-food companies work with low preparation time and preheated or precooked ingredients to reduce transaction time and cost for each purchase.

Fast food is a multi-billion industry continuing to grow at a rapid pace in coming years. Fast-food is often highly processed and prepared in an industrial fashion i.e., with standard ingredient, methodical cooking and production methods. There are several causes behind the success of the fast-food industry. You can get ready made meals at an affordable price. Moreover, away from home or in a hurry, the quench for hunger can be satisfied without much hustle. Brands like McDonald's rapidly accumulated progression for hygiene, rapid response and a child-friendly environment where people traveling could grab a simple supper, or even look for a break from the regimen of home cooking.

2.1.1 History of fast-food industry

The Fast-food Market started in the 1920s and has been rapidly growing and evolving with big-name fast-food chains such as McDonalds, Taco Bell, Wendy's, Burger King, KFC, Jack in the Box, White Castle, etc. In recent years, more health-conscious fast-food companies such as Chipotle, Pita Pit, and BurgerFi emerged offering meals that include ingredients with less pesticides, are hormone and antibiotic-free, and served in biodegradable or recyclable take-out containers.

“Fast food” has a century old history now and originating from the West (mainly the United States of America) has swept over most of the world now. The concept originated in the post World War Two era where middle class American families started having both husband and wife as breadwinners. Their work schedules coupled with no household help, made it difficult to cook all meals at home since it is a time consuming and painstaking process. Furthermore, restaurants with the option of dining in were expensive and took time out of a busy schedule. These factors led to the beginning of the rise of fast food. As this concept

started to grow popular, owners of fast-food restaurants started to open more outlets, making these restaurants into “chains”. When the number of chains started expanding, a single owner could not oversee all processes and thus franchisees started to be given out. This model further enabled fast-food chains to enter totally new markets and cross-national borders into totally untapped markets. It had a great impact on the eating habits not just in American countries but also in Asian countries. Several factors gave rise to the fast-food culture: the Americans interest in automobiles, the formation of a major new highway system, the suburban communities’ development etc. The Asian countries have a strong impact on the American culture of eating out as well. It was observed that there was huge demand for fast-food in Asian countries. Ready to eat food was making a huge mark in these countries which is co-ordinated with urbanization

The main reason behind the success of the multinational chains is their expertise in product development, sourcing practices, quality standards, service levels and standardized operating procedures in their restaurants, a strength that they have developed over years of experience around the world.

2.1.2 History of Indian Fast-Food Industry

India is a country of diversity. Here food is not just considered as a form of nutrition but is also collaborated with customs and traditions. In India the taste and flavours of food preparation keep changing from one state to another. In the early age, people would mostly prefer home cooked food in India. But as urbanization is taking place this scenario seems to be changing completely. Unlike older days people in India now a day prefer eating out food items are perishable and it is very essential for an up gradation of technology especially in the food industry. There is continuous improvement observed in the fast-food technology in India.

One of the largest growing food types in India is fast-food. According to the survey Indian fast-food industry is growing by 40% every year and generates huge sales. India has become one of the biggest hubs for global fast-food chains to grow due to the availability of raw materials, population size etc.

The fast-food market has also become popular in India over the last couple of decades. After the arrival of multinational fast-food chains like McDonalds, KFC, Pizza Hut, Domino’s, Taco Bells, Subway and many others; people have adopted them as part of their culture and hence these chains have intelligently altered their variety to suit and cater local needs.

Due to variety of fast-food brands and outlets the consumer is often observed hoping from one brand to another, which lowers the level of commitment of a consumer to a particular brand.

2.1.3 Reasons for the Emergence of Fast-Food Industry in India

Gender roles

Unlike earlier days now men and women head out for work. Also due to the increasing expenditures and for up gradation of lifestyle it is essential that each member of family is occupied. In such case fast food works as an easy way out in this rush schedule.

Large population

Large number of global players have entered the Indian market due to India being the second largest country having large population.

Relaxation of rules and regulations

Several MNC's are easily entering the Indian market as a result of liberalization of 1991, due to which many tariff and non-tariff barriers from Indian boundaries are removed or at least minimized.

Working women

The women of present generation do not want to stick to traditional gender roles of cooking and upbringing of children. Hence this modernization brings about increase in consumption of fast food.

Paucity of time

In today situation the days are falling short for work. So, when people get free time from their hectic work life, they want to spend it on entertainment and relaxation. Due to paucity of and engagement in the recreational activities a lot of them do not intend to cook and opt for fast food products. The consumers now do not want to spend their energy on preparation of food. They are building their confidence more on the available fast-food brands in the market and hence being more sophisticated.

Double income group

In the current scenario both male and female equally are career oriented. Due to which there is double income and so the spending capacity increases in return it increases the consumption of ready to eat food on larger scale. The emergence of double income group leads to increase in disposable income. Now people have more disposable income so they can spend easily in fast food and other activities.

2.1.4 Challenges Faced by Fast food Industries

- Environment friendly products cost high

Government is legislating laws in order to keep check on the fast-food industry and it is emphasizing more on the usage of bio-degradable and environment friendly products. But associated with this issue is the problem that fast food player faces. The cost associated with the friendly product. They cost much higher than the normal products that companies use for packaging or wrapping their products.

- Health related issues

Consumption of such fast-food increases obesity and leads to overweight which causes diseases like diabetes, high blood pressure, cardio vascular diseases etc. Consuming fast food not only affects the physical health of human beings but also affect the mental health causing depression, fatigue, hypertension etc.

- Balance between societal expectation and companies' economic objectives

It is necessary to balance a society's expectation regarding environment with the economic burden of protecting the environment. Thus, one can see that one side pushes for higher standards and other side tries to beat the standard back.

2.1.5 Major Players in The Indian Fast- Food Industry

- McDonald's Corporation
- Burger King Worldwide, Inc.
- Domino's Pizza Inc.
- KFC.
- Subway System India Pvt. Ltd.
- Tata Starbucks Pvt. Ltd.

CHAPTER THREE
DATA ANALYSIS AND
INTERPRETATION

In this chapter of analysis, data collection and findings of the study are discussed, the descriptive information and statistical analysis produced by the collected survey data are shown. Records are statically analysed with spss software programme.

3.1 Demographic Details of Respondents

The researcher has tried to study the demographic variables of the respondents.

Table 3.1 – Demographic Details of Respondents

	Demogrphic Characterisites	Number of Respondents	Percentage
Gender	Male	62	41.30%
	Female	88	58.70%
		150	100%
Occupation	Student	98	65.30%
	Working	34	22.70%
	Unemployed	18	12%
		150	100%

GENDER

The demographic details of the respondents are shown in Table 3.1. According to the demographic profile, 41.30% of the respondents are male and 58.70% of the respondents are female. The respondents are the past and present customers of the fast-food industry. The total number of respondents for the study is 150. From this survey, it is clear that female respondents are the one who purchase frequently compared to men. This data is collected through Google Forms- Online Survey.

OCCUPATION

Occupation is one of the most important factors which affects the purchasing behaviour of a customer. The study is conducted on 150 respondents from various occupation groups which

includes: students, working and unemployed. According to the demographic details, 65.30% are students, 22.70% are working and 12% are unemployed.

3.2 TEST OF DIFFERENCE OF BRAND NAME OF A PRODUCT ON CUSTOMER BRAND LOYALTY

Brand loyalty is an important aspect of marketing as it helps companies build a strong brand and get the customers again. Brand loyalty is not simply rebuying the products but creating a positive brand image in the consumer’s mind, who becomes a positive brand advocate.

In order to find the difference in brand name and customer brand loyalty, an independent sample T-test is performed. The Independent Samples T -test compares the means of two independent groups in order to determine whether there is statistical evidence that the associated population means are significantly different. The variables considered for the test are, dependent: brand name influence the decision making, and independent: brand loyalty.

H1: There is a positive relationship between brand name and brand loyalty.

Table 3.2(a) T- test showing brand name and brand loyalty

Dependent Variable	t Value	df	Sig.	Independent Variable	N	Mean	Std. Deviation
Brand name influence the decision making	.403	44	.035	Always	7	2.143	.3780
				Often	39	2.000	.9177

An independent samples t-test is performed to test if there is a significant difference on the basis of brand name and brand loyalty of the respondent. The values obtained can be seen in table 3.2(a).

An independent samples t-test revealed that brand loyalty is comparatively greater when it is always (A= 2.143; SD= .1429) as compared to Often (O= .9177; SD= .1469), $t(44) = .403$. Since $p < 0.05$ (two tailed test), we reject the null hypothesis.

The relationships between brand name and brand loyalty are significant.

3.3 TEST OF DIFFERENCE OF PRICE OF A PRODUCT ON CUSTOMER BRAND LOYALTY

Researchers may be interested in determining whether the means from more than two group are equal or not. To test whether the difference in means from more than two groups is statistically significant, Analysis of Variance (ANNOVA is performed). Analysis of variance (ANOVA) is a collection of statistical models and their associated estimation procedures (such as the “variation” among and between groups) used to analyse the differences among group means in a sample.

Here, one-way ANOVA is performed to test if there is a difference in Price and Brand loyalty. The following hypothesis is performed to find the significance and the results shown in Table 3.3(a).

H5: There is a positive relationship between price and brand loyalty.

Table 3.3(a) ANNOVA showing difference in price and brand loyalty

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.078	4	1.769	2.535	.043
Within Groups	101.216	145	.698		
Total	108.293	149			

The one-way ANNOVA test compares the means of one dependent variable and one independent variable in order to determine whether there’s statistical evidence that the associated population means are significantly different. The variables considered for the test are: -

3.3.1 Dependent Variable – How often you eat fast food

Independent Variable – Price influences the decision making

There is positive relationship between two variables. This effectively means that as price increases, loyalty also increases. It was found that the p value was 0.043; $p < 0.05$. Thus, the null (H_0) can be rejected and there is a significant difference between the price and brand loyalty of the respondent.

3.4 TEST DIFFERENCE OF QUALITY WITH OCCUPATION OF THE RESPONDENTS

An independent samples t-test is performed to test if there is a significant difference in the quality of food on the basis of occupation of the respondent. The values obtained can be seen in table 3.4(a).

H9: There is a positive relationship between quality of food and occupation.

Table 3.4(a) T- test showing quality of food and occupation

Dependent Variable	t Value	df	Sig.	Independent Variable	N	Mean	Std. Deviation
Quality of the food influence the decision making	2.025	44	.039	Student	98	2.143	1.612
				Working	34	2.000	1.324

This simply implies that as food quality increases, the consumer loyalty also increases in value. There is a little association between the two variables, prescribing a considerable weak but positive relationship between food quality and customer loyalty. An independent samples t-test revealed that interpersonal influence before buying a product is comparatively greater for students ($S=2.143$; $SD=1.612$) as compared to working ($W=2.000$; $SD=1.324$), $t(44) = 2.025$. Since $p < 0.05$, we reject the null hypothesis.

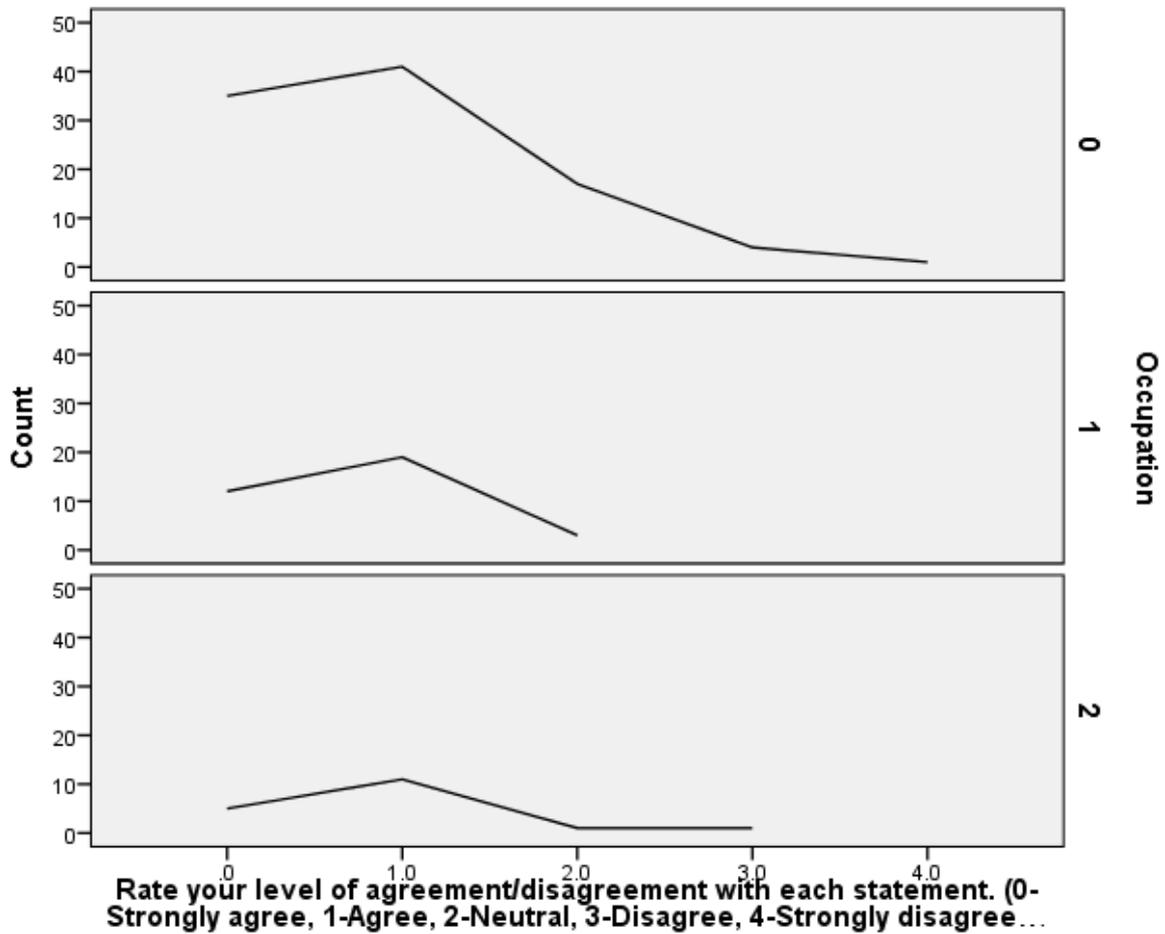


Figure 3.4(a) Diagram showing the mean plot of quality of food and occupation of respondent

3.5 CONVENIENCE AND BRAND LOYALTY

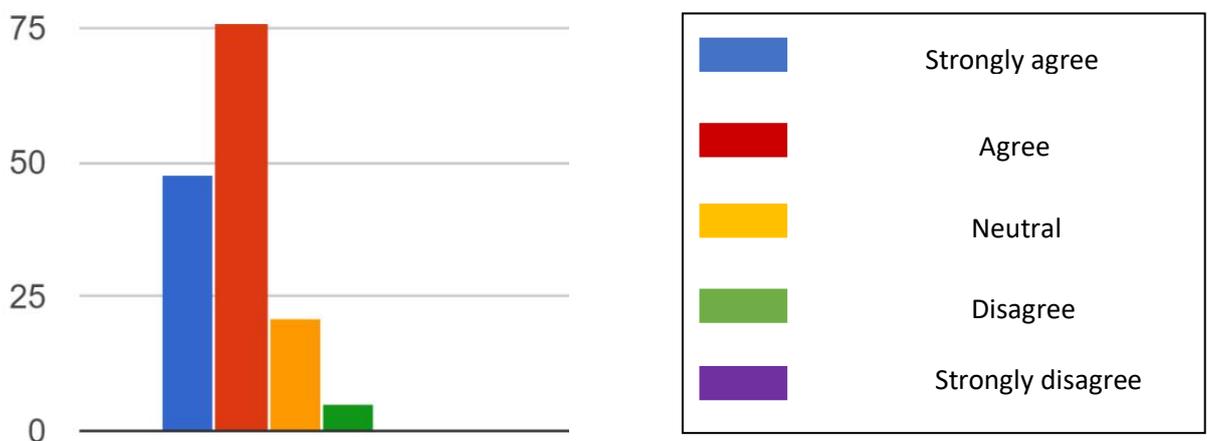


Figure 3.5(a) Diagram showing the graphical representation of how convenience plays a major role in deciding the fast-food restaurant.

Convenience plays a major role in deciding the fast-food restaurant			
		Frequency	Percent
Valid	Strongly agree	48	32%
	Agree	76	50.70%
	Neutral	21	14%
	Disagree	5	3.30%
	Strongly disagree	0	0%
	Total	150	100.00%

Figure 3.5(b) Table showing how much convenience plays in deciding the fast-food restaurant.

The above table shows the number of respondents who consider convenience as a major reason in choosing the fast-food restaurant. According to this, 32% strongly agree, 50.7% agree, 14% are neutral (either agree or disagree) and 3.3% disagree.

3.6 QUALITY OF FOOD AND BRAND LOYALTY



Figure 3.6(a) Diagram showing the graphical representation of how quality of food is the reason to choose the fast-food restaurant.

Quality of food is the reason to choose the fast-food restaurant			
		Frequency	Percent
Valid	Strongly agree	87	58%
	Agree	52	34.70%
	Neutral	8	5.30%
	Disagree	2	1.30%
	Strongly disagree	1	0.70%
	Total	150	100.00%

Figure 3.6(b) Table showing how quality of food is the reason to choose the fast-food restaurant.

The above table shows the number of respondents who consider quality of food as a major reason in choosing the fast-food restaurant. According to this, 58% strongly agree, 34.7% agree, 11% are neutral (either agree or disagree), 1.3% disagree and 0.7% strongly disagree.

3.7 BRAND NAME AND BRAND LOYALTY



Figure 3.7(a) Diagram showing the graphical representation of how brand name influence in deciding the fast-food restaurant.

Brand name influence in deciding the fast-food restaurant			
		Frequency	Percent
Valid	Strongly agree	36	24%
	Agree	62	41.30%
	Neutral	42	28%
	Disagree	9	6%
	Strongly disagree	1	0.70%
	Total	150	100.00%

Figure 3.7 (b) Table showing how brand name influence in deciding the fast-food restaurant.

The above table shows the number of respondents who consider brand name as a reason in choosing the fast-food restaurant. According to this, 24% strongly agree, 41.3% agree, 28% are neutral (either agree or disagree), 6% disagree and 0.7% strongly disagree

CHAPTER THREE
FINDINGS, SUGGESTIONS AND
CONCLUSIONS

4.1 List of Findings

1. Table 3.1 shows the demographic details of the respondents.
2. Table 3.2(a) shows the independent sample t-test for finding the variation between significant difference on the basis of brand name and brand loyalty of the respondent.
3. Table 3.3(a) shows the One - way ANOVA performed to find the differences in price and brand loyalty. It shows that there is a significant difference between price and brand loyalty of the respondent.
4. Table 3.4(a) T- test showing quality of food and occupation. It shows that there is a significance between quality and occupation of the respondents.
5. Table 3.4(b) Diagram showing the mean plot of quality of food and occupation of respondents.
6. Table 3.5(a), 3.5(b) Diagram showing the graphical representation of how convenience plays a major role in deciding the fast-food restaurant. It shows that a little more than half of the respondents agree to this.
7. Table 3.6(a), 3.6(b) Diagram showing the graphical representation of how quality of food is the reason to choose the fast-food restaurant. It shows that more than half of the respondents strongly agree to this factor.
8. Table 3.7(a), 3.7(b) Diagram showing the graphical representation of how brand name influence in deciding the fast-food restaurant. It shows that almost half of the respondents agree to this factor.

4.2 Suggestions

To have enduring victory in the fast-food restaurant industry it is essential to make faithful customers through a system of marketing the relationships. An important part to building a relationship is client fulfilment with business dealings. They imply that happy customers are more motivated to be held. Consistent with our discoveries, the keys to client fulfilment for fast food outlets are Food quality, Service quality, Hygienic Food, location, promotion, and value for money. The fast-food restaurants should focus on the following factors which are mainly focused by the customers.

1. As the majority of the buyers are students, the restaurants can introduce products which are more youth friendly. Fast food restaurants must reduce their prices and improve the quality and quantity as the customers are feeling bored and are not happy

to pay the prices for the concerning deals. This could be beneficial for fast food restaurants in making wise decisions because now customer have more options and they are more price conscious. Also, this could help them in providing good atmosphere and healthier fast food because now people are more health conscious.

2. Based on the research, the fast-food restaurants should improve the quality of their food because majority of people found fast food restaurants a less healthy option. A client who encounters quality feasting is a happy client, and that means greater restaurant revenues. A fulfilled client additionally proposes your restaurant to others.
3. Also, the company can engage the customers more by conducting events and competitions. This will help in enhancing the customers shopping experience.
4. Also, the company must ensure that they get timely and same variety and collection of products as their other outlets in the various cities and countries so that the customer never gets the opportunity to feel that the stores in other cities and countries have better a collection.

4.3 Conclusion

As India is heading towards modernization the fast-food industry will keep expanding. The changes in the living condition of the country bring about progress in the fast-food business. There are various reasons like men and women simultaneously working, increased number of single parent households, long distance to school and work, short lunch times etc for growth of this sector in India. There is definitely growth in the business of the fast-food industry in India which is positively affecting the economy but s every coin has two sides, there are certain drawbacks as well. It is negatively affecting the human health resulting in serious health disorders.

The study was conducted to find the relationship between occupation and brand loyalty and the different factors influencing them with reference to fast food restaurants.

The study revealed that the preference of consumers for fast food restaurants is caused by the status with the price and quality they deliver.

Consumer faithfulness relies on upon quality of meals, administration quality, cost, hygiene, communication and promotions. All these are in immediate association with consumer loyalty so we might as well centre and fortify these variables.

From this it is evident that occupation and quality of food were significant factors influencing brand loyalty. Respondents in the students' category showed more brand loyalty with the product compared to respondents from the working and unemployed category. Also, customers in the students' category showed more overall brand loyalty towards the fast-food restaurants as compared to other customers.

Through this study, we also found that price and the quality of the fast food that is offered by the restaurants plays a major role deciding the restaurant which in turn increases brand loyalty.

BIBLIOGRAPHY

- https://www.researchgate.net/publication/339721792_The_Brand_Loyalty
- https://www.tandfonline.com/doi/abs/10.1300/J369v08n03_04
- <https://www.diva-portal.org/smash/get/diva2:843071/FULLTEXT01.pdf>
- <https://www.consumerbrandbuilders.com/7-factors-effect-customer-loyalty/>
- https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3495259
- <https://www.grin.com/document/281199>
- <https://tesi.luiss.it/15698/1/177941.pdf>
- https://www.academia.edu/57138920/Fast_Food_Entereng_New_Markets
- https://www.researchgate.net/publication/228136941_Food_Retailing_Fast_Food_Industry
- <https://www.slideshare.net/VinuArpitha/growth-of-fast-food-industries-in-india>
- https://www.researchgate.net/publication/333712737_A_Study_on_Scenario_of_Fast-Food_Industry_in_India
- <https://www.marketresearch.com/Food-Beverage-c84/Food-Service-Hospitality-c169/Fast-Food-c523/>
- https://www.academia.edu/3990816/Factors_affecting_Brand_Loyalty_a_perspective_of_fast_food_restaurants
- https://www.researchgate.net/publication/233641988_Factors_Affecting_Brand_Loyalty_A_study_in_an_emerging_market_on_fast_moving_consumer_goods

REFERNCES

Factors affecting Brand Loyalty: A study in an emerging market on fast moving consumer goods: S Ramesh Kumar and Jai Yashwant Advani.

Fournier, S., and Yao, J.L. (1997), "Reviving brand loyalty: A reconceptualization within the framework of consumer - brand relationships", *International Journal of Research in Marketing*, Vol. 14, Issue 5, pp.451-472.

Acheson, D. and Wicking, N. (1992), "Fast food Franchising and Finance". In *Fast Food Operations and Their Management* (Ball, S., ed.), Stanley Thornes, pp 147-68.

Anderson, E.W. and Sullivan, M. (1993), "The antecedents and consequences of customer satisfaction for firms", *Marketing Science*, Vol. 12 No. 2, pp. 125-43.

Aga, M. Safakli, V.O. (2007). An empirical investigation of service quality and customer satisfaction in professional accounting firms: Evidence from North Cyprus. *Problems and practices in Management*. Volume 5.

J. T., Bowen, and S.-L. Chen, "The relationship between customer loyalty and customer satisfaction", *International Journal of Service Industry Management*, 15(4), 213-217, 2001.

Clark, M & Wood, CR 1998, „Consumer loyalty in the restaurant industry: A preliminary exploration of the issues“, *International Journal of Contemporary Hospitality Management*, vol. 10, no 4, pp. 139–144.

Islam, N & Ullah, SGM 2010, „Factors Affecting Consumers“ Preferences On Fast Food Items In Bangladesh“, *The Journal of Applied Business Research*, vol. 26, no. 4.

The Impact of Product and Service Quality on Brand Loyalty: An Exploratory Investigation of Quick-Service Restaurants, Allen Z. Reich PhD, Ken W. McCleary PhD, Yodmanee Tepanon and Pamela A. Weaver PhD.

Brand Loyalty: An exploratory Research on the Relationship between Low Product Involvement and Brand Loyalty by Ingemansson Viktor, Nilsson Isac & Vllasalija Dasaret (2015).

Kabiraj, S., and Shanmugan, J. (2011). 'Development of a conceptual framework for brand loyalty: A Euro-Mediterranean perspective'. *Journal of Brand Management*. 18(4/5), 285-299.

Kim, J., Morris, J. D., and Swait, J. (2008). 'Antecedents of true brand loyalty'. *Journal of Advertising*. 37(2), pp. 99-117.

7 Factors That Affect Customer Loyalty by Michael Houlihan & Bonnie Harvey.

Factors Affecting Brand Loyalty: A Perspective of Fast-Food Restaurants,

Rehman, A., Zia-ur-Rehman, M., & Akhtar, W. (2012). Factors affecting Brand Loyalty: a perspective of fast-food restaurants. *Actual Problems of Economics*, 130, 13-20.

Ibrahim, N.A., The relationship between customer satisfaction and brand loyalty in the fast-food industry of United Kingdom (Doctoral dissertation, University of East London), 2013.

Suryansh Gupta; *Fast Food: Entering New Markets*, 2021.

Nandy Ashis. The changing popular culture of Indian Food: Preliminary Notes. *South Asia Research*, vol 24, No. 1, 9-19(2004). Sage Publications.

A Study on Scenario of Fast-Food Industry in India; Miss Siddhi Prashant Chitnis
M.phil, Chhatrapati Shahu Institute of Business Education and Research, Kolhapur,
Maharashtra, India.

Khurshid Anwar Warsi, feb(2005), *Food retailing : fast-food industry*.

Minal Kashyap, Komal Kashyap, Dr Anil Sarda (2013), *A study of growth of fast-food industry with reference to shift in consumers buying habits in Nagpur city*.

Khurshid Anwar Warsi, feb(2005), *Food retailing : fastfood industry*

Priya Keshari, C. P. Mishra (16th march, 2016), *growing menace of fast-food consumption in India: Time to act*.

ANNEXURE
QUESTIONNAIRE

1. Name *

2. Age(in years) *

3. Gender *

Mark only one oval.

- Male
- Female
- Other
- Prefer not to say

4. Occupation *

Mark only one oval.

- Student
- Working
- Unemployed
- Retired

5. Please select the fast food restaurant you visit frequently *

Check all that apply

Check all that apply.

McDonald's

KFC

Burger King

Starbucks

Domino's

Taco Bell

Other: _____

6. How often do you eat fast food? *

(1-Always, 2-Often, 3-Sometimes, 4-Rarely, 5-Never)

Mark only one oval.

	1	2	3	4	5	
Always	<input type="radio"/>	Never				

7. Please indicate to what extent you agree/disagree with each statement. *

Mark only one oval per row.

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Convenience plays a major role in deciding a fast food restaurant	<input type="radio"/>				
Quality of food is the reason to choose the restaurant	<input type="radio"/>				
Brand name influence the decision making	<input type="radio"/>				
Quality of service towards customers helps in deciding the restaurant	<input type="radio"/>				
I find the packaging of the fast food safe and hygienic	<input type="radio"/>				

8. Rate your level of agreement/disagreement with each statement. (1-Strongly agree, 2-Agree, 3-Neutral, 4-Disagree, 5-Strongly disagree) *

Mark only one oval per row.

	1	2	3	4	5
Purchasing habit has been influenced by promotions of fast food chains on social media	<input type="radio"/>				
Location effects the decision making of the fast food chain	<input type="radio"/>				
Timeliness of the fast food chain influence the purchasing habit	<input type="radio"/>				
Rewards influence in deciding the fast food restaurant	<input type="radio"/>				
I find the pricing of the fast food feasible	<input type="radio"/>				

Project Report

On

**A STUDY OF DEALING INFECTIOUS
DISEASES MATHEMATICALLY**

Submitted

in partial fulfilment of the requirements for the degree of

MASTER OF SCIENCE

in

MATHEMATICS

by

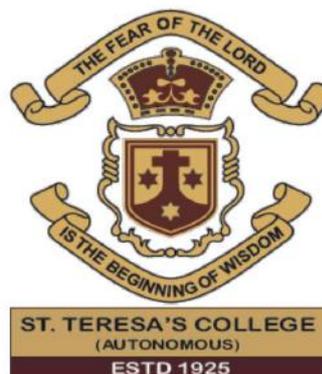
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(Register No. SM20MAT013)

(2020-2022)

Under the Supervision of

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APRIL 2022

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

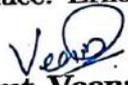


CERTIFICATE

This is to certify that the dissertation entitled, **A STUDY OF DEALING INFECTIOUS DISEASES MATHEMATICALLY** is a bonafide record of the work done by Ms. **RANIYA J ANTONY** under my guidance as partial fulfillment of the award of the degree of **Master of Science in Mathematics** at St. Teresa's College (Autonomous), Ernakulam affiliated to Mahatma Gandhi University, Kottayam. No part of this work has been submitted for any other degree elsewhere.

Date: 27/05/2022

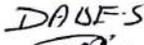
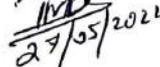
Place: Ernakulam

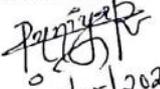

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DECLARATION

I hereby declare that the work presented in this project is based on the original work done by me under the guidance of SMT VEENA V.S, Assistant Professor, Department of Mathematics, St. Teresa's College(Autonomous), Ernakulam and has not been included in any other project submitted previously for the award of any degree.

Place: Ernakulam

Date: 27-05-2022



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SM20MAT013

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Place: Ernakulam.

Date: 27/05/2022



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Chapter 1

Introduction and History

1.1 INTRODUCTION

Mathematical models can project how infectious diseases progress to show the likely outcome of an epidemic and help inform public health interventions. Models use basic assumptions or collected statistics along with mathematics to find parameters for various infectious diseases and use those parameters to calculate the effects of different interventions, like mass vaccination programmes. The modeling can help decide which interventions to avoid and which to trail, or can predict future growth patterns, etc. COVID-19 is one of the major examples among infectious diseases. Six feet was proposed as a safe separation distance to prevent the spread of COVID-19 Diseases transmission can also occur through contact of contaminated surfaces, but this work focuses on transmission via inhalation of expelled aerosols during coughing/sneezing and breathing/talking and the impact of environmental factors.

1.2 HISTORY

The modelling of infectious diseases is a tool that has been used to study the mechanism by which diseases spread to predict the future course of an outbreak and to evaluate strategies to control an epidemic. The earlier account of mathematical modelling of the spread of diseases was carried out in 1760 by Daniel Bernoulli, trained as a physician; Bernoulli created a mathematical model to define the practice of

inoculating against smallpox. First model in mathematical epidemiology is the work of Daniel Bernoulli (1700-1782) on inoculation against smallpox. In the eighteenth century smallpox was an epidemic. G. R. Phaijoo and D. B. Gurung established that dengue is spreading in new areas due to people movement. They considered a multipath model to assess the influence of temperature and human movement on the transmission dynamics of dengue disease. Dynamics of vector and host populations are investigated with different human movement rates and different temperature levels. N. Pipatsart et al. discussed adaptive random network models to describe human behavioural change throughout epidemics and performed stochastic simulations of SIR epidemic models on adaptive random networks.

Chapter 2

Modelling of infectious diseases

The modeling of infectious diseases is a tool that has been used to study the mechanisms by which diseases spread, to predict the future course of an outbreak and to evaluate strategies to control an epidemic.

2.1 Steps of mathematical modelling

The stages involved in mathematical modelling are formulation, solution, interpretation and validation. Emphasizes that mathematical modeling is a non-linear process that includes five interrelated steps: (i) Identify and simplify the real-world problem situation. (ii) Build a mathematical model. (iii) Transform and solve the model. (iv) Interpret the model. (v) Validate and use the model.

2.2 Importance of Mathematical Modelling

Mathematical modelling is capable of saving lives, assisting in policy and decision-making, and optimizing economic growth. It can also be exploited to help understand the Universe and the conditions needed to sustain life, used to study the mechanisms by which diseases spread, to predict the future course of an outbreak and to evaluate strategies to control an epidemic.

Chapter 3

EPIDEMIC MODELLING

Mathematical modeling of infectious diseases has become a key tool in order to understand, predict and control the spread of infections. The aim of epidemic modelling is thus to model the spread of a disease in a population made up of a (possibly large) integer number of individuals. Population is divided into classes of susceptible, infective and recovered individuals. Disease dynamics can then be characterized by a mathematical description of each individual's transitions between compartments, subject to the state of the remaining individuals.

3.1 TYPES OF EPIDEMIC MODELS

3.1.1 Stochastic

“Stochastic” means being or having a random variable. A stochastic model is a tool for estimating probability distributions of potential outcomes by allowing for random variation in one or more inputs over time. A stochastic model, in its formulation, takes into account the random nature of an infectious disease. The stochastic model we study here is based on the “birth-and-death process with immigration” (BDI for short), which was proposed in the study of population growth or extinction of some biological species. The stochastic mathematical models of infectious diseases represent a more realistic approach to epidemics, because they allow the recognition of the initial patterns in an epidemic the analysis of the spatial distribution of case numbers in a given

location, and allow estimations about the duration of an epidemic

3.1.2 Deterministic

In deterministic models, the output of the model is fully determined by the parameter values and the initial conditions. When dealing with large populations, as in the case of tuberculosis, deterministic or compartmental mathematical models are often used. In a deterministic model, individuals in the population are assigned to different subgroups or compartments, each representing a specific stage of the epidemic. The transition rates from one class to another are mathematically expressed as derivatives, hence the model is formulated using differential equations. While building such models, it must be assumed that the population size in a compartment is differentiable with respect to time and that the epidemic process is deterministic. In other words, the changes in population of a compartment can be calculated using only the history that was used to develop the model

3.1.3 The SIR Model

W.O. Kermack and A.G. Kendrick created a model in which they considered a fixed population with only three compartments: susceptible, $S(t)$; infected, $I(t)$; and recovered, $R(t)$. $S(t)$ is used to represent the individuals not yet infected with the disease at time t , or those susceptible to the disease of the population. $I(t)$ denote the individuals of the population who have been infected with the disease and are capable of spreading the disease to those in the susceptible category. $R(t)$ is the compartment used for the individuals of the population who have been infected and then removed from the disease, either due to immunization or due to death. Those in this category are not able to be infected again or to transmit the infection to others. The second set of dependent variables represents the fraction of the total population in each of the three categories. So, if N is the total population $s(t) = S(t)/N$, the susceptible fraction of the population, $i(t) = I(t)/N$, the infected fraction of the population, and $r(t) = R(t)/N$, The recovered fraction of the population.

3.1.4 Other Compartmental Models

There are many modifications of the SIR model, including those that include births and deaths, where upon recovery there is no immunity (SIS model), where immunity lasts only for a short period of time (SIRS), where there is a latent period of the disease where the person is not infectious (SEIS and SEIR), and where infants can be born with immunity (MSIR).

3.2 Continuous Time Modelling

Anderson and May (1991) Diekmann and Heesterbeek (2000) Keeling and Rohani (2008) Gave an introduction to epidemic modelling using primarily deterministic models based on ordinary differential equations (ODEs) in the setting of the susceptible-infective-recovered (SIR) model and its extensions. In a continuous model, events can take place at every point in time. For example, the time between birth and death can be any positive decimal number. Let $S(t)$, $I(t)$ and $R(t)$ Denote the number at time t of susceptible, infective and recovered individuals, respectively.

$$\frac{ds(t)}{dt} = -\frac{\beta}{N}S(t)I(t) \quad (3.1)$$

$$\frac{dI(t)}{dt} = \frac{\beta}{N}S(t)I(t) - \gamma I(t) \quad (3.2)$$

$$\frac{dR(t)}{dt} = \gamma I(t) \quad (3.3)$$

Where the parameter $\beta \geq 0$ is the transmission rate and $\gamma \leq 0$ describes the removal rate. The initial condition is given by $S(0)$, $I(0)$, which are known integers, and $R(0) = 0$. In a population of fixed size $N=S(0) + I(0)$ the expression for

$$\frac{dR(t)}{dt} \quad (3.4)$$

in the above ODE system is redundant because $R(t)$ is implicitly given as

$$N - S(t) - I(t) \tag{3.5}$$

Chapter 4

Disease Transmission

Epidemics of infectious diseases among humans and other animals result from the transmission of a pathogen either directly between hosts or indirectly through the environment or intermediate hosts. The environment is important for the survival of intermediate hosts and vectors, which can affect the efficiency of transmission. Infectious diseases are often spread through direct contact.

4.1 How to prevent disease transmission

Because infectious diseases can spread through direct or indirect contact, everyone is at risk of illness. You have a higher risk of becoming ill when you're around sick people or in areas susceptible to germs. If you work in or visit a care centre, a day-care centre, a hospital, or a doctor's office, takes extra precautions to protect you.

4.1.1 Illness

Something as simple as touching a doorknob, elevator button, light switch, or another person's hand increases the likelihood of coming in contact with germs that can make you sick. The good news is that a few simple precautions can prevent some disease transmission. For example, make sure you wash your hands frequently and thoroughly. Use soap and warm water and vigorously rub your hands together for at least 20 seconds. If you can't wash your hands, use an alcohol-based hand sanitizer. Washing your hands is the gold standard though. Other

tips to prevent the spread of disease in areas with germs include: ● wash your hands or use hand sanitizer before handling food and after shaking hands ● always wash with soap and water if your hands are visibly soiled ● try to minimize touching your mouth or nose with your hands ● avoid sick people, if possible ● wear disposable gloves to avoid contact with blood and faces ● use disposable gloves when caring for an ill person ● cover your mouth when you sneeze and cough and wash your hands afterward ● teach children not to put their hands or objects in their mouths ● sanitize toys and changing tables

4.1.2 Foodborne illness

Dangerous organisms can thrive in improperly prepared food. Avoid cross-contamination by keeping raw meats and produce separate. Use different preparation surfaces for raw meats and wash surfaces and utensils thoroughly. Freeze or refrigerate perishable foods and leftovers promptly. According to the United States Department of Agriculture, you should set your refrigerator to 40°F (4°C) or below and your freezer to 0°F (-18°C) or below. Cook meats to a minimum internal temperature of 145°F (63°C). Cook ground meats to 160°F (71°C) and poultry to 165°F (73°C).

4.1.3 Insects and animals

When camping or enjoying wooded areas, wear long pants and long sleeves. Use insect repellent and mosquito netting. Don't touch animals in the wild. Don't touch sick or dead animals.

4.1.4 Vaccinations

Stay up to date on vaccinations, especially when traveling. Don't forget to keep your pet's vaccinations current, too. Vaccinations can drastically reduce your risk of becoming ill with some infectious diseases. If you can avoid a particular disease, you can also prevent the spread of the disease. There are different types of vaccinations, such as those to prevent: ● measles ● mumps ● influenza ● human papillomavirus

4.2 Infectiousness comprises three major components: biological, behavioural and environmental.

4.2.1 Biological infectiousness over time after infection for three different human pathogens

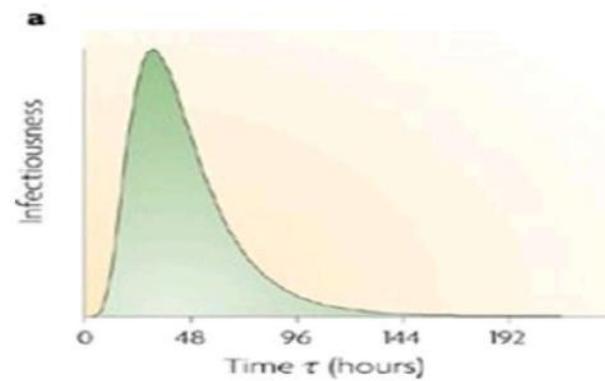


Figure 4.1: Influenza A: based on viral shedding in experimental human infections.

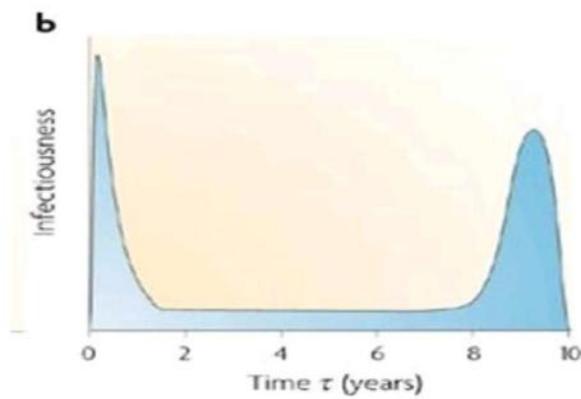


Figure 4.2: HIV-1 based on retrospective analysis of HIV-1 discordant couples and viral load data.

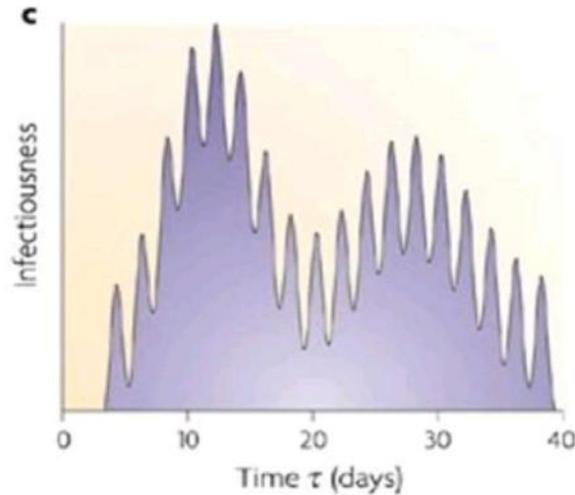


Figure 4.3: Malaria: infectiousness to mosquitoes of infected humans based on the detection of infectious gametocytes in the blood after therapeutic treatment of syphilis by inoculation with plasmodium vivax.

4.2.2 Pathogen Transport and Transmission risk

An integrated modelling approach has been developed to better understand the relative impacts of different expiratory and environment factors on airborne pathogen transport and transmission, motivated by the recent COVID-19 pandemic. Computational fluid dynamics (CFD) modelling was used to simulate spatial-temporal aerosol concentrations and quantified risks of exposure as a function of separation distance, exposure duration, environmental conditions and face coverings.

4.3 Expiratory events and aerosol generation

4.3.1 Coughs and sneezes

Expiratory actions such as coughing and sneezing can yield thousands of minor respiratory droplets extending in size from $1 - 1000\mu\text{m}$ that are expelled from the nose and mouth at high velocities. During a sneeze, respiratory droplets are expelled at velocities over 20m/s for brief periods typically lasting up to 0.25 s . Expiratory actions such as coughing and sneezing can yield thousands of minor respiratory droplets extending in size from $1 - 1000\mu\text{m}$ that are expelled from the nose and mouth at high velocities. During a sneeze, respiratory droplets

are expelled at velocities over 20m/s for brief periods typically lasting up to 0.25 s. Expiratory actions such as coughing and sneezing can yield thousands of minor respiratory droplets extending in size from 1 – 1000 μ m that are expelled from the nose and mouth at high velocities. During a sneeze, respiratory droplets are expelled at velocities over 20m/s for brief periods typically lasting up to 0.25 s. Previous studies have shown that expelled respiratory droplets can travel as far as 7 – 8 m (23-26 ft.). Higher temperatures increase the vapour pressure and volatilization of respiratory droplets, while higher relative humidity decreases the amount of volatilization. Their model was compared to experiments and showed good correlation. Performed computational fluid dynamics (CFD) simulations of the impact of wind and relative humidity on the transport and dynamics of respiratory droplets and confirmed that micro droplets follow the airflow streamlines well and can travel further than 6 feet.

4.3.2 Breathing and talking

Breathing and talking yield fewer and smaller droplets per exhalation than coughing or sneezing. Talking can yield several times more droplets than breathing, and singing can yield some times more droplets than talking. The exhaled velocity during breathing or talking is on the order of 1 m/s assuming a mouth opening of 4 cm², an exhaled volume of 0.5 – 1 L, and a breathing rate of 16 breaths/s (3.75 s/breath). This yields a Reynolds number on the order of 1000, which is 30 – 40 times less than the Reynolds number for coughing or sneezing. Thus, the exhaled aerosols during breathing and talking have much lower momentum than coughing or sneezing and do not propagate as far. However, because the sizes of the droplets that are emitted during tidal breathing are small, the exhaled aerosol plume can remain suspended for long periods. Thus, despite the lower viral load per exhalation event relative to coughs or sneezes, the persistence of the minor aerosolized droplets and non-stop nature of breathing and/or talking can increase the potential for transmission, especially in enclosed spaces with low

fresh-air exchange.

4.4 Graphical representation of the spread of infectious diseases

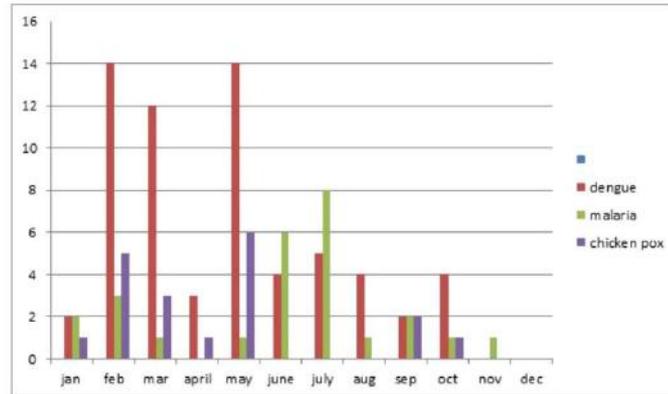


Figure 4.4: Figure in Latex

This is the graphical representation of spread of infectious diseases. And this data collected from Govt. Hospital angamaly .The graph showing the number of infected individuals from the disease malaria, dengue and chicken pox. And the horizontal axis showing the month and the vertical axis showing the number of infected.

4.4.1 Malaria

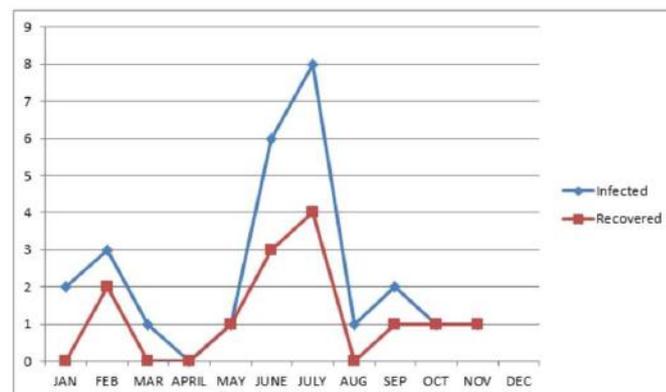


Figure 4.5: Figure in Latex

This is the graphical representation of the infectious disease malaria. The vertical axis showing the number of infected and recovered and

the horizontal axis showing the month. The graph showing the number of infected and recovered from the disease malaria. From the graph we can see that the number of infected is higher than the number of recovered.

4.4.2 Dengue

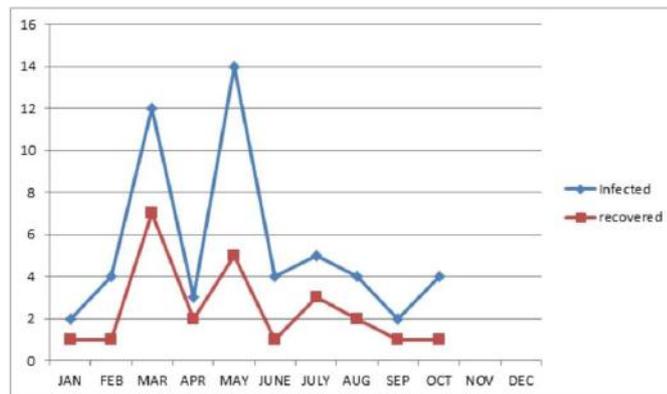


Figure 4.6: Figure in Latex

This is the graphical representation of the infectious disease dengue. The vertical axis showing the number of infected and recovered and the horizontal axis showing the month. The graph showing the number of infected and recovered from the disease dengue. From the graph we can see that the number of infected is higher than the number of recovered.

4.4.3 Chicken pox

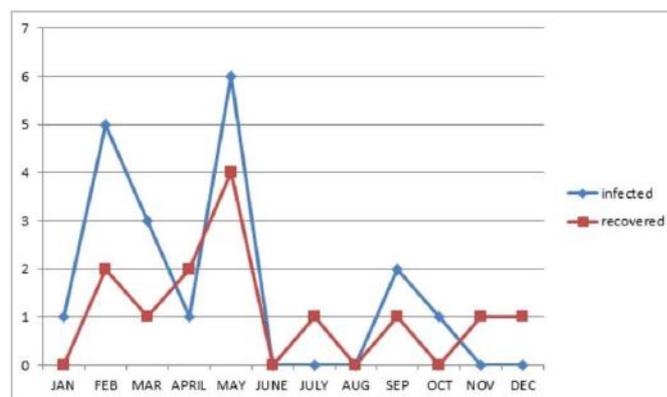


Figure 4.7: Figure in Latex

This is the graphical representation of the infectious disease Chicken pox. The vertical axis showing the number of infected and recovered

and the horizontal axis showing the month. The graph showing the number of infected and recovered from the disease chicken pox. From the graph we can see that the number of infected is higher than the number of recovered.

From the study of above three graphs of the particular disease malaria, dengue and chicken pox, I arrive at a conclusion that the number of infected is always higher than the number of recovered. And the recovered is always less than the infected .This is the study that I have been made. And I arrive at a conclusion that the number of infected is higher than the recovered.

Chapter 5

Applications in Modelling of Infectious Diseases

Mathematical models are being increasingly used to understand the transmission of infections and to evaluate the potential impact of control programmes in reducing morbidity and mortality. Determining optimal control strategies against new or emergent infections, such as SARS-CoV-2, zika or Ebola, or against HIV, tuberculosis and malaria. Predicting the impact of vaccination strategies against common infections such as measles and rubella. Application of mathematical models to disease surveillance data can be used to address both scientific hypotheses and disease-control policy questions. Models exactly represent the real problem situations. Models help managers to take decisions faster and more accurately. They typically offer convenience and cost advantages over other means of obtaining the required information on reality.

Chapter 6

Conclusion

Mathematical modelling with spatial effects plays a significant role in characterizing and understanding the spread of particular infectious diseases. Epidemiologists use mathematical models in order to track the progress of most infectious diseases. They may also discover the likely outcome of an epidemic or to help manage them by vaccination. Mathematical models are a key tool for guiding public health measures, and outputs from epidemiological modelling analyses should be considered alongside numerous factors (such as potential economic and mental health effects of interventions) when deciding how to intervene. Models can demonstrate important principles about outbreaks and determine which interventions are most likely to reduce case numbers effectively.

REFERENCES

- [1] Anderson, R. M. May, R. M. *Infectious diseases of humans: dynamics and control* (Oxford Univ. Press, 1991). – Google Scholar .
- [2] Blower S, Bernoulli D (2004). "An attempt at a new analysis of the mortality caused by smallpox and of the advantages of inoculation to prevent it". *Reviews in Medical Virology*. 14 (5): 275–88. doi:10.1002/rmv.443. \protect\unhbox\voidb@x\protect\penalty\@M\PMID\protect\unhbox\voidb@x\protect\penalty\@M\15334536. \protect\unhbox\voidb@x\protect\penalty\@M\S2CID\protect\unhbox\voidb@x\protect\penalty\@M\8169180
- [3] Daley DJ, Gani J (2005). *Epidemic Modeling: An Introduction*. New York: Cambridge University Press
- [4] *Mathematical Modeling and Control of Infectious Diseases* retrieved from- <https://www.hindawi.com/journals/cmmm/2017/7149154/>
- [5] *Modelling and dynamics of infectious diseases*, retrieved from <https://1lib.in/book/688862/532b3f>
- [6] *Modelling of infectious diseases- Wikipedia*

**Communication Apprehension, Family Pathology and
Rumination among Married Individuals**

Dissertation submitted in partial fulfilment of the requirements for the award of
Master of Science in Psychology

By

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Abstract

Communication is an integral part of any relationship. Communication apprehension can create problems in relationship, and even among family members leading to family pathology. In addition to that, negative thinking style like rumination can cause severe distress to an individual. The present study is conducted among 174 married individuals (male-83 and female-91), who were from the state of Kerala. Data was collected using demographic sheet, Personal Report of Communication Apprehension, Family Pathology Scale and Rumination response scale. The statistical analysis used are Spearman's rank correlation, Mann Whitney U test, t-test and regression analysis. The results shows that there is significant relationship between Communication Apprehension and Family Pathology, Communication Apprehension and Rumination, Family Pathology and Rumination, and that the relationship between Communication Apprehension and Family Pathology is mediated by Rumination. It was also found that there is a significant difference in communication apprehension, rumination and family pathology among men and women.

Keywords: Communication Apprehension, Family Pathology, Rumination

CHAPTER I

INTRODUCTION

High communication apprehensive are those whose fear of communicating outweighs the expected benefit of communicating in a particular situation (Phillips, 1968; McCroskey, 1970). When forced to communicate, such people expect negative thoughts and outcomes from communication and will avoid it if at all feasible, or suffer from a variety of anxiety-like symptoms.

Communication improves language development, content concept and skill learning, rigour and engagement, empathy and understanding of others' perspectives, agency and ownership of key ideas across disciplines, and social and emotional abilities for creating effective relationships. Communication apprehension is the broad term that refers to an individual's "fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 2001). According to empirical studies on communication apprehension, a person's level of communication apprehension predicts occupational choice. (Daly & McCroskey, 1975), small group seating options (McCroskey & Leppard, 1975), classroom seating choices (McCroskey & Sheahan, 1976), reduced interaction (Wells & Lashbrook, 1970), self-esteem (McCroskey & Richmond, 1975), and self-disclosure (McCroskey & Richmond, 1975). (Hamilton, 1972).

Communication apprehension (CA) affects many people in a variety of ways, whether they are aware of it or not. For some, it's the obvious discomfort that comes with being asked to speak in front of a group. For others, it's the jittery feeling they get before having to speak in front of a group or the shock of nerves they get when coming into a meeting (Andrew C. Petry, 2016).

A person who has a high level of communication anxiety is more prone to have doubts about other people's communication (Low, 1950; Giffin & Heider), and will have difficulty in discussing personal problems especially to significant others such as parents (Phillips, 1968) and they tend to feel secluded and ineffective in social relationships (Low & Sheets, 1951). As a result, it may affect the family cohesiveness and lead to family pathology.

Family pathology is defined as the extent to which maladaptive behaviour is present amongst the family members in their interaction with each other that is, in between spouses and between parents and children (Conna Walls, 2020). And when family pathology exists in a family it will lead to a negative atmosphere and may have an adverse effect on mental health.

Rumination is a cognitive process linked to an increased risk of acquiring psychopathology and maintaining emotional diseases such as sadness and anxiety. Rumination is defined as an "obsessive or abnormal reflection upon an idea or deliberation over a choice." (Merriam Webster). Rumination is the focused attention on the symptoms of one's distress, and on its possible causes and consequences, as opposed to its solution (Nolen-Hoeksema, 1998). Rumination, on the other hand, is frequently associated with depressive rumination, which refers to compulsive, negative thinking about the past or present. (Elizabeth J. Lewis, Jutta Joorman, 2018). Rumination is a

form of preservative cognition that focuses on negative content, generally past and present, and results in emotional distress.

Communication apprehension is a kind of fear or anxiety that is related to real or anticipated communication with others. Communication apprehension has been defined as a wide personality trait that has a significant impact on a person's communication behaviour (McCroskey, 1970). Communication apprehension have strong links between adventurousness, surgency, and general anxiety, while the links between self-control, emotional maturity, and tolerance for ambiguity were large enough to be considered clearly meaningful (James C. McCroskey, John A. Daly). From this study we can identify the impact CA on family pathology and rumination. Thus, also help in identifying and managing the communication apprehension which means, Low communication anxiety, on the other hand, is usually a good thing. Many of the following characteristics are likely to be present in such a person: High interactor, joiner, seeks high communication occupations, mature, a leader, independent, self-assured, assertive, competitive, cheerful, expressive, talkative, responsible, determined, high moral standards, innovative, sociable, many emotional responses, enjoys people, thick-skinned, impulsive, distrustful, ego involved, self-opinionated, resilient, secure, able to cope, self-confident, strong control, self-respect.

There is a crucial role of communication in the development and satisfaction of the marital relationship. Marital dissatisfaction is also an indication of inadequate communication between family members. Communication apprehension is one factor that can have a significant impact on the individual in a marriage relationship. A person with communication

apprehension will have reduced amount of self-disclosure, decreased trust in others, communication-apprehensive person are negatively regarded by others in terms of social attraction, desirable communication partners, and attraction of desirable sexual partners. So, from this study we will get to know more about the connection between CA, family pathology and rumination and thus Individuals can learn to manage and possibly prevent these factors to set themselves up for success in communication settings if they are made aware of what is or can cause them to experience higher levels of anxiety.

Need and significance

Communication apprehension is one variable which may have profound consequences for the individual in the marriage relationship. Communication apprehension has been found to have a variety of effects upon individual communication behaviour including reduced self-disclosure (Hamilton,1972) and thus lead to less transparency in relationship and absence of transparency makes marriage healthier and also inadequate communication between family members. It can also affect reduced trust in others communication. And if it persists for significant amount of time, then it can result in reduced marital satisfaction and family pathology wherein the couples will show maladaptive behaviour in their interaction with each other and might also lead to ruminative thoughts ultimately decreased marital satisfaction and divorce.

CHAPTER II
REVIEW OF LITERATURE

Literature review

Here attempts have been made to check with the previous studies that have already been done the variables Ruminations, Communication apprehension and Family pathology. Review of literature will bring out the studies that have already been done in these areas of research, the feasibility of the study and the research gap which will provide a clear idea about the study. The following are the previous studies conducted related to the variables considered in the present study.

Individual pathology of children was more strongly related than that of their parents to the level of family pathology (William. A Scott, 2007). Underachievers were found to face slightly more family pathology than achievers. Communication satisfaction correlated negatively with both anger expression and family pathology. Family pathology and anger expression were found to be positively correlated (S. Mitra & Mukherjee, 2012). The difference of family pathology and social support in the relapsed of bipolar affective disorder and schizophrenia patients. Family pathology is high in the families of patients with schizophrenia in comparison to Bipolar Affective Disorder

Patient's family but the social support is poor in the families of patients with schizophrenia in comparison to Bipolar Affective Disorder Patient's family (Bhupendra Singh, Amool R. Singh, Manisha Kiran, 2014). Intelligence is strongly associated with academic achievement; Family pathology is negatively and significantly related with academic achievement. Two variables of school environment namely creative stimulation and cognitive encouragement is significantly and positively associated with academic achievement (Pradeep Shyam Ranjan, 2020). Higher family pathology has a negative correlation with emotional competence of an individual (Manasvita Mohan & Anjali Sahai, 2020).

Mike Allen and John Bourhis (2009), studied the relationship of communication apprehension to communication behavior and found a consistent negative relationship between the level of communication apprehension and communication skills. Chinese students from protective and laissez-faire families have a higher level of Communication apprehension than those from pluralistic families. In terms of socio-communicative orientation, Chinese students from pluralistic families tend to be more assertive than those from laissez-faire families and students from pluralistic families tend to be more responsiveness than those from protective families (Yuan, 2010). In a study on Effectiveness of Psychological Intervention on Communication Apprehension And Its Psychosocial Correlates Among College Students it was found that Demographic factors like gender, father's education, and mother's education had an influence on the communication apprehension, and family income had a significant effect on self-esteem. Communication Apprehension had a negative relationship with the self -esteem, self - perceived

communication competence, willingness to communicate, and positive relationship between the self-esteem, self - perceived communication competence, and willingness to communicate. And finally, it was seen that Self-esteem and self-perceived communication competence contributed to communication apprehension among engineering students (Ayesha Parveen H, 2020). Timothy Curran, John Seiter, Mengfei Guan, Taylor White (2020) studied and tested associations between mother-child communication apprehension, adult child communication apprehension, and adult child resilience, self-esteem, and depressive symptoms. Results showed that mother communication apprehension positively predicted adult child communication apprehension. Moreover, adult child communication apprehension predicted lower levels of resilience and self-esteem, and higher levels of depressive symptoms. Cimona Sebastian & Noble Chacko(2020) conducted a on Job Stress, Communication Apprehension and Marital Adjustment in Lady Professionals, and it was found that there is partial significant correlation between job stress and marital adjustment and there is significant correlation between marital adjustment and communication apprehension. In addition, there is no significant correlation between Job stress and communication apprehension. The results also state that there is no significant difference between communication apprehension and marital adjustment. A study on Oral communication apprehension in the classroom it was found that high OCA students experience debilitating mental and physical anxiety during oral communication in the classroom (Jill Annette Love, 2013).

A meta-analysis of different types of repetitive thinking, rumination was found to be closely related to worry, intrusions, self-reproach, neuroticism, and

rehearsal (Seegerstrom et al.2003). Study on Rumination and Depression in Adolescence, results showed that rumination predicted prospective fluctuations in symptoms of depression and general internalizing problems specifically but not anxious arousal or externalizing problems. (Benjamin L. Hankin, 2010). Rumination was hypothesized to mediate the relation between quality of attachment relations and symptoms of depression. Findings showed that most indices of quality of attachment relations were significantly associated with rumination and symptoms of depression. It was also found that relation between communication with peers and depressive symptoms was fully mediated by rumination, whereas partial mediation was found for the relations between parental trust and depressive symptoms, and between alienation from peers and depressive symptoms. (Tamara Ruijten, Jeffrey Roelofs & Leo Rood, 2011). Irina Elliott and Suzanne Coker, (2011) studied Independent self-construal, self-reflection, and self-rumination: A path model for predicting happiness, Results showed that independent self-construal had no effect on people's proclivity to self-reflect and self-ruminate. Happiness was associated with a higher level of independent self-concept. The findings also revealed that self-reflection can both increase and decrease subjective happiness (when mediated by self-rumination). While positive self-reflection can be beneficial for people who are unhappy, it can also lead to self-rumination, which has a negative impact on happiness. Eldeleklioglu, jale (2015), examined the Predictive Effects of Subjective Happiness, Forgiveness, and Rumination on Life Satisfaction and found out that forgiveness and subjective happiness were found to be positively related to life satisfaction, while rumination was found to be negatively related to life satisfaction, also

revealed that subjective happiness and forgiveness positively predicted life satisfaction, while rumination negatively predicted life satisfaction. Yingkai Yang B.S., Songfeng Cao M.A., Grant S. Shields M.A., Zhaojun Teng M.A., Yanling (2016), studied the relationships between rumination and core executive functions and found a significant negative association between rumination and inhibition or set-shifting. There was no significant association between rumination and working memory. Aman Sado Elemo, Seydi Ahmet Satici and Mehmet Saricali (2018) investigated the role of forgiveness and vengeance in mediating the relationship between anger rumination and subjective happiness. According to structural equation modelling, the relationships between rage rumination and subjective satisfaction were completely mediated by forgiveness and revenge. It was also found that there is a significant indirect impact of rage rumination on subjective satisfaction due to the mediating influence of forgiveness and revenge. This result indicates that forgiveness and revenge help to explain the connection between rage rumination and subjective happiness. Yueli Zheng, Zongkui Zhou, Qingqi Li, Xiujuan Yang and Cuiying Fan (2019), Studied whether self-control and rumination can help to mediate the link between perceived stress and lower life satisfaction in adolescents and found that perceived stress was negatively associated with life satisfaction, self-control and rumination both partially mediated the relationship between perceived stress and life satisfaction in a parallel pattern; and self-control and rumination also sequentially mediated the relationship between perceived stress and life satisfaction. Furthermore, it revealed that self-control and rumination can mediate the relationship between

perceived stress and life satisfaction not only concurrently, but also sequentially.

CHAPTER III

RESEARCH METHODOLOGY

Aim

To assess the mediating role of rumination on the relationship between communication apprehension and family pathology.

Statement problem

1. Whether there will be a significant relationship between communication apprehension, rumination and family pathology among married individuals?
2. Whether the relationship between communication apprehension and family pathology is mediated by rumination among married individuals?
3. Whether there is a significant difference in the level of rumination, communication apprehension and family pathology among men and women?

Objectives

1. To find the relationship between communication apprehension and family pathology.
2. To find the relationship between communication apprehension and rumination.

3. To find the relationship between family pathology and rumination.
4. To find whether ruination has a mediating effect on communication apprehension and family pathology.
5. To study the difference in rumination among men and women.
6. To study the difference in Communication apprehension among men and women.
7. To study the difference in family pathology among men and women.

Hypothesis

H1: There is significant relationship between communication apprehension and family pathology.

H2: There is significant relationship between communication apprehension and rumination.

H3: There is significant relationship between family pathology and rumination.

H4: The relationship between communication apprehension and family pathology is mediated by rumination.

H5: There exists a significant difference in rumination among men and women.

H6: There exists a significant difference in communication apprehension among men and women.

H7: There exists a significant difference in Family pathology among men and women.

Operational definitions

Communication apprehension is operationally defined as the sum of the scores obtained in the a) group discussion b) meetings c) interpersonal and d) public speaking dimensions of the Personal Report of Communication Apprehension.

Group discussion in CA is the level of fear or anxiety of communicating or the idea of interacting. Interpersonal anxiety an anxiety syndrome associated with either real or anticipated communication with another person or persons. And public speaking in CA refers to the anxiety associated with public speaking.

Family pathology is defined as the sum of the scores obtained in Family Pathology Scale (FPS), higher score indicates higher family pathology. All the items in the FPS are indicative of family pathology. The family pathology is the extent to which maladaptive behaviour is present amongst the family members in their interaction with each other that is between spouses and between parents and children.

Rumination is defined as the sum of scores obtained in the Rumination response scale, high score indicates higher rumination. Rumination is a type of persistent cognition that focuses on bad content, usually from the past or present, and causes emotional misery.

Sample

The sample for the present study were married individuals, both male (n=83) and (female n=91) samples (N=174) were randomly selected and given the questionnaire and those who can read and understand English language were only included in this study. The sampling technique selected for the study is convenient sampling method.

Population

The population selected for this study is married individuals of Kerala state.

Sampling design

Inclusion criteria

- Only married individuals were included in this study.
- The samples were only taken from Kerala, India.

Exclusion criteria

- Unmarried individuals were excluded.
- Married individuals from other states were not taken for the study.

Tools used for data collection

The questionnaire consisted of three sections:

1. Informed Consent – this was developed by the researcher. It contains the voluntary consent of the participants to take part in the questionnaire provided their identity will be kept confidential.
2. Demographic sheet- this part of the questionnaire collects the basic details of the participants such as name, age and gender.
3. The Personal Report of Communication Apprehension (PRCA-24) is an instrument designed by James McCroskey. The scale measure communication apprehension of the participants. The scale consists of 24 items four subscales. There are 6 items in interpersonal scale, meeting and public speaking. The PRCA-24 is a 5-point Likert type scale. 1 point for ‘Strongly Disagree,’ 2

points for 'Disagree,' 3 points for 'Neutral,' 4 points for 'Agree' and 5 points for 'Strongly Agree.' This instrument is highly reliable and has a very high predictive validity.

4. The Family Pathology (FPS) questionnaire developed by Dr. Vimala Veeraraghavan and Dr. Archana Dogra. The family pathology scale, indicates the extent to which maladaptive behaviour is present amongst the family members in their interaction with each other i.e. between spouses and between parents and children. The scale consists of 42 items and 3-point rating scale, with 1 point for response 'never' indicating low/ no family pathology, 2 points for 'Occasional response,' and 3 points for 'most often,' respectively. The test-retest reliability for this scale was $X_{tt} = 0.79$. The test-retest reliability was estimated to be $X_{tt} = 0.63$, with an index of reliability $X_{tt} = .79$.
5. The Rumination response scale (RRS) was formed by Treynor et al. The scale consists of 10 items. Each item is scored on a 4-point Likert scale, 1 point for 'almost never', 2 points for 'sometimes,' 3 points for 'often,' and 4 points for 'almost always.' It has a high level of internal reliability (Cronbach's $\alpha = .85$).

Procedure

The data of the samples were collected through a digital platform where the scale was circulated as an online questionnaire through Google forms. The questionnaire began with a voluntary participation form which also included the confidentiality of the data that was entered followed by the demographic details such as age, gender etc of the participant. The Personal Report of Communication Apprehension, Family Pathology and Rumination questionnaire was used which took the participants 20 minutes to complete it. All the data was acquired and the final results were achieved through SPSS.

Data analysis technique

The responses of the subject were analysed using Statistical Package for Social Sciences (SPSS) and Excel sheet. SPSS is a statistical software developed by IBM for data management, analysis and investigation. The following statistical tool was applied for data analysis.

Table 1

Result of Shapiro-Wilk test of normality for Communication Apprehension Scale, Family Pathology Scale and Rumination Scale among married individuals.

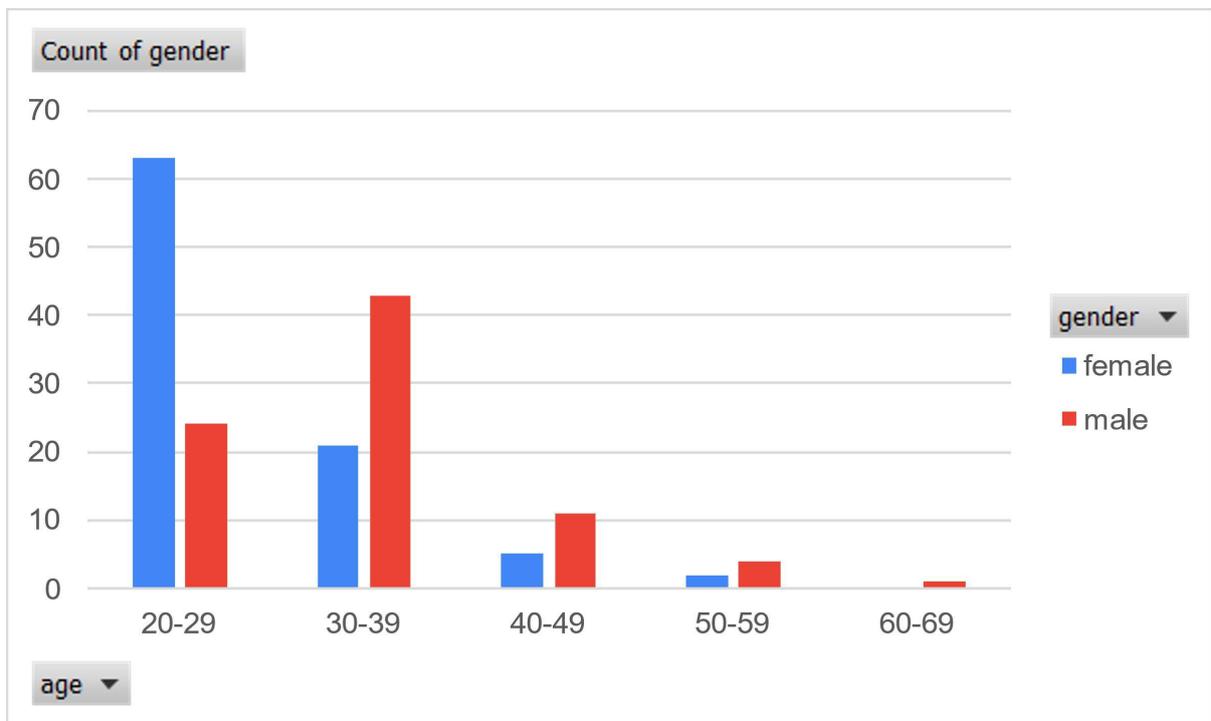
Variables	K	df	Sig
Communication	.992	.174	.489
Apprehension			
Family pathology	.963	.174	.000
Rumination	.977	.174	.005

The result of Shapiro-Wilk test of normality of Communication Apprehension shows that the variable is normally distributed among the sample ($p=.489$, $p>0.05$). The Shapiro-Wilk test of normality of Family

Pathology and Rumination shows that the variables are not normally distributed in the sample ($p < 0.05$).

CHAPTER IV

RESULT AND DISCUSSION



The study was conducted among 174 participants. the descriptive research design was used to meet the objectives of the study. The data was analysed using Spearman’s rank correlation, Mann Whitney U test, t-test and regression analysis.

Figure 1

Distribution of participants on the basis of age and gender.

Total 174 participants, out of which 91 are female and 83 are male.

H1: To find the relationship between communication apprehension and family pathology.

Table 2

The table shows the Correlation between communication apprehension and family pathology.

Variables	Family pathology
Communication apprehension	0.256**

*Significance at 0.01 level.

The table shows the correlation between Communication Apprehension and Family Pathology. The correlation coefficient is found to be 0.256 which is significant at 0.01 level. This indicates a substantial positive relationship between the variables. This means that an increase in the level of Communication Apprehension will lead to increase in family pathology. Hence, the hypothesis H1 “To find the relationship between communication apprehension and family pathology” is accepted.

Fear or worry connected with actual or expected contact with another person or persons is known as communication apprehension, McCroskey (2001), and family pathology indicates the extend to which maladaptive behaviour is amongst the family members given by Vimala Veeraraghavan and Archana Dorga (2000). Communication apprehension will have variety of effects upon individuals' communication behaviour including reduced self-disclosure (Hamilton,1972) and thus lead to less transparency in relationship and absence of transparency might make marriage and relationships unhealthier also result in inadequate communication between family members.

The findings contradict previous study given by S. Mitra and Mukherjee, (2012), which found that Communication satisfaction is correlated negatively with both anger expression and family pathology. Family pathology and anger expression were found to be positively correlated.

H2: There is significant relationship between communication apprehension and rumination.

Table 3

The table shows the Correlation between communication apprehension and Rumination.

Variables	Rumination
Communication Apprehension	.234**

*Significance at 0.01 level

The table shows the correlation between Communication Apprehension and Rumination. The correlation coefficient is found to be 0.234 which is significant at 0.01 level. This indicates a substantial positive relationship

between the variables. This means that an increase in the level of Communication Apprehension will lead to increase in Rumination. Hence, the hypothesis H2, “There is significant relationship between communication apprehension and rumination” is accepted.

As the finding says communication apprehension is positively correlated with rumination. A person with high level of CA will have difficulty in getting involved in discussions, meetings and conversations. They will be conscious about their acts and fearful of situations where he/she has to speak or tell their opinions and this will in turn make individuals always think why do they always react this or why do they have problems other people don't have and so on James McCroskey and Treynor et al (2003).

The supporting study was given by Dawn M. Sweet, Douglas Gentile and Lanmiao, they found that Mindfulness had a direct negative relationship with communication apprehension and a direct positive relationship with willingness to communicate, whereas depression, anxiety, and stress each had a direct negative relationship with communication apprehension and willingness to communicate. Rumination was also directly associated with communication apprehension and willingness to communicate, and it was mediated through depression, anxiety, and stress.

H3: There is significant relationship between family pathology and rumination.

Table 4

The table shows the Correlation between family pathology and Rumination.

Variables	Rumination
Family Pathology	.496**

*Significance at 0.01 level.

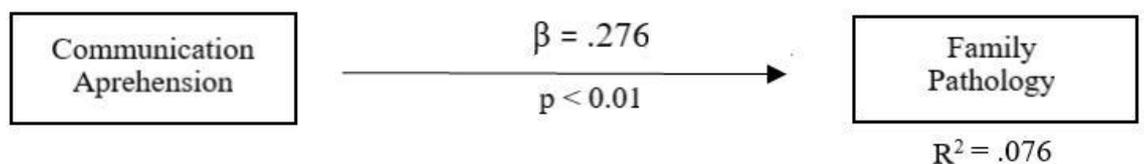
The table shows the correlation between Family Pathology and Rumination. The correlation coefficient is found to be 0.496 which is significant at 0.01 level. This indicates a substantial positive relationship between the variables. It means that an increase in the level of family pathology will lead to increase in Rumination. Hence, the hypothesis H3, “ There is significant relationship between family pathology and rumination” is accepted.

The individuals with high level of family pathology might constantly be in tension thinking that family members might mistake him/her and they keep trying to please everyone in the family and in the process, will find he/she doesn't have time for themselves. And these thoughts (rumination) will persist in these individuals Dr. Vimala Veeraraghavan and Dr. Archana Dogra (2000).

H4: The relationship between communication apprehension and family pathology is mediated by rumination.

Figure 2

The figure shows the regression analysis between Communication Apprehension and Family Pathology.



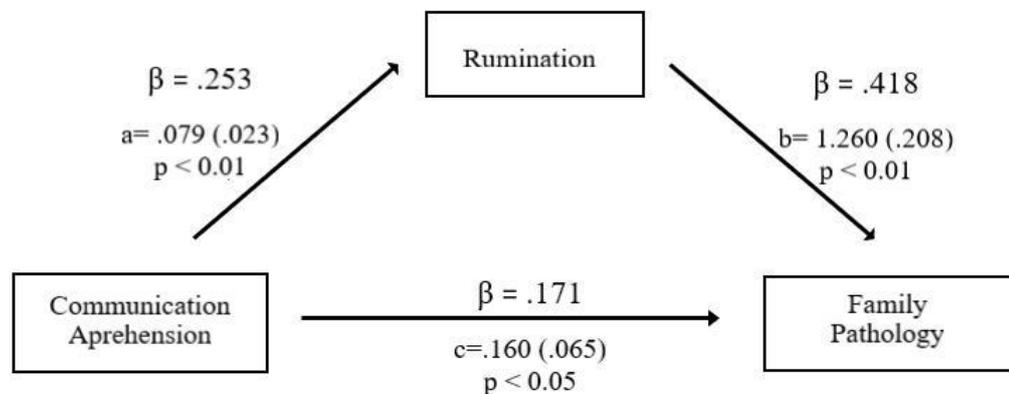
Regression analysis was conducted to analyse the effect of the predictor variable Communication Apprehension on the outcome variable Family

Pathology. The predictor variable was significantly correlated with outcome variable during correlational analysis.

There is a significant amount of variability of R^2 for Family Pathology caused due to its relationship to Communication Apprehension. It can be depicted that for every one unit of Communication Apprehension observed it counts for $R^2 = 0.076$ units of Family Pathology.

Figure 3

The figure shows the mediation effect of rumination in the relationship between Communication Apprehension and Family Pathology.



There is a significant positive relationship between Communication Apprehension and Family Pathology ($p < 0.01$). Thus, higher the Communication Apprehension higher the Family Pathology observed.

There is also a significant positive relationship between Communication Apprehension and Rumination ($p < 0.01$) and between Rumination and Family Pathology ($p < 0.01$).

In a stepwise regression it was found that Communication Apprehension ($\beta=0.171$, $p<0.05$) and Rumination ($\beta=0.418$, $p<0.01$) were significant positive predictors for Family Pathology.

The total model explained 23.9% of variance in Family Pathology ($R^2=0.239$). The indirect effect between Communication Apprehension and Family Pathology via the intermediate variable of rumination is statistically significant ($a \times b=0.099$, $p<0.01$) thus, Communication Apprehension and Rumination were significant predictors of Family Pathology. Rumination had a mediating effect on the relationship between Communication Apprehension and Family Pathology.

The supporting study was given by Down M. Sweet, Douglas Gentile and Lanmiao He, (2021). They found that Rumination was directly associated with communication apprehension and willingness to communicate, and it was mediated through depression, anxiety, and stress.

Another study given by Tamara Ruijten, Jeffrey Roelofs and Lea Rood, (2011) found that the relation between communication with peers and depressive symptoms was fully mediated by rumination, whereas partial mediation was found for the relations between parental trust and depressive symptoms, and between alienation from peers and depressive symptoms.

H5: There exists a significant difference in Rumination among men and women.

Table 5

The table shows the result of Mann-Whitney U test comparing difference in Rumination among men and women.

Gender	N	Mean Rank	U	Z
Male	83	77.77	2969	-
Female	91	96.37		2.4

The result of Mann-Whitney U test comparing difference in Rumination among men and women shows that the mean rank of male is 77.77 and female is 96.37 which has a significance value of $p=0.015$ ($p<0.05$). which means that there is significant difference in Rumination among male and women. Hence, the hypothesis H5, “There exists a significant difference in rumination among men and women is accepted.

The women’s might be having higher rumination compared to male because it might be fostered by experiences resulting from women's social status that is subordinate to men in the society. Which make them less confident in what they are doing, low self-esteem and make them more vulnerable to persistent distress, Jodi Frantz, Amber Marlow et. al, (2005).

The supporting study given by Daniel P Johnson et al. (2013), found that gender differences in depression result is in part due to women’s tendency to ruminate more than male.

H6: There exists a significant difference in communication apprehension among men and women.

Table 6

The table shows the result of t test comparing difference in Communication Apprehension among men and women.

Variable	Gender	N	Mean
Communication Apprehension	Male	83	58.96
	Female	91	70.90

The above table shows the result of t-test comparing difference in Communication Apprehension among male and women. The mean value of male is 58.96 and female is 70.90. The t value is -5.477, df is 172 which has a significance value of $p=0.000$ ($p<0.01$). which means that there is significant difference in Communication Apprehension among male and women. Hence, the hypothesis H6 “There exists a significant difference in communication apprehension among men and women” is accepted.

Women are more inclined to compare themselves to other women. They are pressured to portray perfection in order to meet societal expectations. The ideal woman has been shaped by television to be assertive, independent, and outgoing. If a woman thinks she lacks these qualities, she may feel self-conscious, which can lead to communication anxiety. This could explain why females have a much greater CA level than males (Jodi Frantz, Amber Marlow & Jennifer Wathen, 2005). And also, they will have lower self-esteem (Alejandro Campero-Oliart and Christopher T Lovelace, 2000).

These findings were supported by study Jodi Frantz, Amber Marlow and Jennifer Wathen, which found a statistically significant difference in the level of communication apprehension experienced by males and females.

H7: There exists a significant difference in Family pathology among men and women.

Table 7

The table shows the result of Mann-Whitney U test comparing difference in Family Pathology among men and women.

Variable	Gender	N	Mean Rank
Family Pathology	Male	83	78.31
	female	91	95.88

The result of Mann-Whitney U test comparing difference in Family Pathology among men and women shows that the mean rank of male is 78.31 and female is 95.88 which has a significance value of $p=0.022$ ($p<0.05$). which means that there is significant difference in Family Pathology among male and

women. Hence, the hypothesis H7 “There exists a significant difference in Family pathology among men and women” is accepted.

The findings shows that female has a higher level of family pathology than compared to male. It might be because women are the ones who are more rejected in a patriarchy society how much ever developed, we are. Rejection can be a reason for women to have higher levels of family pathology. From childhood girls are more vulnerable to physical neglect, denial of love and affection, lack of interest in the girl’s activities and achievements and lack of respect for the girl’s right and feeling as compared to boys (Akriti Kushwaha, 2021).

CHAPTER V

CONCLUSION

This chapter summarizes the present study ‘Communication Apprehension, Family Pathology and Rumination among Married Individuals’. The study seeks to find out the relationship between Communication Apprehension, Family Pathology and Rumination among Married Individuals and also to find out the mediating role of rumination in the relationship between Communication Apprehension and Family Pathology.

Findings

1. Communication Apprehension is significantly positively correlated with family pathology.
2. Communication Apprehension is significantly positively correlated with rumination.
3. Family Pathology is significantly positively correlated Rumination.
4. The relationship between communication apprehension and family pathology is mediated by rumination.

5. There exists a significant difference in rumination among men and women.
6. There exists a significant difference in communication apprehension among men and women.
7. There exists a significant difference in Family pathology among men and women.

Implications

1. The study provides an insight about how Communication Apprehension is affecting the family pathology, help people to understand about how is Communication Apprehension affecting their lives and make the needful changes.
2. This data can be used by psychologists, counsellors in planning and conduct intervention programs to overcome Communication Apprehension, Family Pathology and Rumination among all individuals and build a confident society.
3. Schools can take initiatives in removing communication anxiety from the school level itself to help children grow to a confident person without communication apprehension.

Limitations

1. The data were collected mostly using google form.
2. The samples were not of equal gender distribution.
3. The participants loss interest towards the end, because of the large number of items in the questionnaire.

Suggestions for future research

1. It would be better if we give the participants directly the questionnaire which will help us to know qualitative data along with quantitative data.
2. The sample size can be increased for further researches in this area.

References

- Allen, M., & Bourhis, J. (1996). The relationship of communication apprehension to communication behavior: A meta-analysis. *Communication Quarterly, 44*(2), 214-226.
- Bylund, E. (1996). Relationship between life change events and communication apprehension.
- Campero-Oliart, A. R., Lovelace, C. T., & Levitan, L. C. (2020). Contexts of Communication Apprehension and Their Relation to Self-Esteem. *Psi Chi Journal of Psychological Research, 25*(1).
- Curran, T., Seiter, J., Guan, M., & White, T. (2021). Associations Between Mother–Child Communication Apprehension, and Young Adult Resilience, Depressive Symptoms, and Self-Esteem. *Psychological Reports, 124*(3), 1093-1109.

- Eldeleklioğlu, J. (2015). Predictive effects of subjective happiness, forgiveness, and rumination on life satisfaction. *Social Behavior and Personality: an international journal*, 43(9), 1563-1574.
- Family pathology scale*. (2021, August 13). SCRIBD.
<https://www.scribd.com/document/520012140/Family-Pathology-Scale>
- Fleck, S. (1980). Family functioning and family pathology. *Psychiatric Annals*, 10(2).
<https://doi.org/10.3928/0048-5713-19800201-07>
- Frantz, Jodi; Marlow, Amber; and Wathen, Jennifer (2005) "Communication Apprehension and its Relationship to Gender and College Year," *Journal of Undergraduate Research at Minnesota State University, Mankato*: Vol. 5, Article 7.
- Huang, Y. (2010). *Family communication patterns, communication apprehension and soci-communicative orientative orientation: A study of chinese students* (Doctoral dissertation, University of Akron).
- Love, J. A. (2013). *Communication Apprehension in The Classroom: A Study of Nontraditional Graduate Students at Ohio University*. Ohio University.
- McCroskey, J. C., & Andersen, J. F. (1976). The relationship between communication apprehension and academic achievement among college students. *Human communication research*, 3(1), 73-81.
- Mohan, M. (2020). Impact Of Family Pathology On Emotional Competence Of College Students. *Impact Of Family Pathology On Emotional Competence Of College Students*. <https://www.researchgate.net/journal/International-Journal-of-Advanced-Research-2320-5407>

- Nolen- Hoeksema, S. (2001). Mediators of gender difference in rumination. *SAGE Journals*, 25(1), 37–47. <https://journals.sagepub.com/doi/10.1111/1471-6402.00005>
- Ruijten, T., Roelofs, J., & Rood, L. (2011). The mediating role of rumination in the relation between quality of attachment relations and depressive symptoms in non-clinical adolescents. *Journal of child and family studies*, 20(4), 452-459.
- Singh, B., Singh, A. R., & Kiran, M. (2014). Family pathology and social support in relapse among Bipolar Affective Disorder and Schizophrenia Patients. *International Journal of Enhanced Research in Medicines & Dental Care*, 1(8), 1-6.
- Sweet, D. M., Gentile, D., & He, L. (2021). Communication Apprehension and Willingness to Communicate in Veterinary Medicine Students: Implications for Mindfulness and Communication Training. *Health Communication*, 1-9.
- Veeraraghavan Vimala and Dogra Archana (2000). Manual for Family Pathology Scale. Psychoeducational Testing Center New Delhi.
- Zheng, Y., Zhou, Z., Liu, Q., Yang, X., & Fan, C. (2019). Perceived stress and life satisfaction: a multiple mediation model of self-control and rumination. *Journal of Child and Family Studies*, 28(11), 3091-3097.

APPENDICES

APPENDIX-A

CONSENT FOR PARTICIPATING IN THE RESEARCH

I'm Raniya Mohideen pursuing my masters in psychology from ST Teresa's College. I'm conducting a survey research on the topic " Communication Apprehension, family pathology and rumination among married individuals. I kindly request to read the questions and mark the responses carefully. Please try to make your responses honestly which will be very helpful to my survey research.

Protection of rights and confidentiality

The confidentiality of your identity as well as responses will be maintained. the information collected are only used for academic purposes. Information gathered in this research will be subjected to statistical analysis, may be published or presented in public forums, however any of your identifying information will not be used or revealed. You can stop participating at any time

I have read all the above information and I truly understood the nature of the study. I agree to participate in the study.

Agree and continue

Disagree and exit

APPENDIX B

DEMOGRAPHICAL DETAILS

Name:

Age:

Gender : Male /Female

APPENDIX C

This instrument is composed of twenty-four statements concerning feelings about communicating with others. Please indicate the degree to which each statement applies to you by marking whether you:

Strongly Disagree = 1 Disagree = 2 Neutral = 3 Agree = 4

Strongly Agree = 5

1. I dislike participating in group discussions.
2. Generally, I am comfortable while participating in group discussions.
3. I am tense and nervous while participating in group discussions.
4. I like to get involved in group discussions.
5. Engaging in a group discussion with new people makes me tense and nervous.
6. I am calm and relaxed while participating in group discussions.
7. Generally, I am nervous when I have to participate in a meeting.
8. Usually, I am comfortable when I have to participate in a meeting.
9. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
10. I am afraid to express myself at meetings.
11. Communicating at meetings usually makes me uncomfortable.
12. I am very relaxed when answering questions at a meeting.
13. While participating in a conversation with a new acquaintance, I feel very nervous.
14. I have no fear of speaking up in conversations.
15. Ordinarily I am very tense and nervous in conversations.
16. Ordinarily I am very calm and relaxed in conversations.

17. While conversing with a new acquaintance, I feel very relaxed.
18. I'm afraid to speak up in conversations.
19. I have no fear of giving a speech.
20. Certain parts of my body feel very tense and rigid while giving a speech.
21. I feel relaxed while giving a speech.
22. My thoughts become confused and jumbled when I am giving a speech.
23. I face the prospect of giving a speech with confidence.
24. While giving a speech, I get so nervous I forget facts I really know.

APPENDIX D

There are 42 statements given which depict the behaviour of an individual in the family surroundings and his perception towards family members. You have to read each statement carefully and mark the tick (✓) on any of the three response mode against each statement.

Statements	Most often	occasionally	Never
1. I ask the child to come. The moment he comes, I send him back. I can never say what I want to communicate.			
2. I am all the time on guard, lest what I say may make the other person hurt me.			
3. I am always worried about what other family members think about me and my behaviour.			
4. I always fear that my children may leave me.			
5. In my house, quarrels are invariably among the members not following certain rules and regulations.			
6. I spend hours together on prayers and insist that others should also do the same.			
7. I have to spend hours together in wiping, cleaning and dusting			
8. I have to wash everything because I feel my family members have defiled the things since they did not wash themselves.			
9. I sometimes feel that I spend all my time on all these activities and have no time to rest.			
10. I keep testing every now and then whether the children love me or not.			
11. I always want the children to come to			

me and demonstrate their affection			
12. I get panicky when they (children) show more affection towards an outsider lest they get attracted towards them.			
13. I get angry when the children spend more time with my spouse than me.			
14. I like to see my children always around me.			
15. I never send them to the relatives or friends house even for a few hours.			
16. I feel very nervous when the child expresses a wish to go away from home.			
17. I keep telling my child he should do things as I say.			
18. I keep rewarding my child for everything but still I find he/she is not attached to me.			
19. Over the years my rewarding techniques have become more and more expensive for me.			
20. I get hurt when the child disobeys me.			
21. Whenever I get angry or frustrated, I punish the child.			
22. I feel so disturbed by the children that I lock them in the room for atleast 3-4 hours a day.			
23. Sometimes my anger becomes so extreme that I just don't know what I am doing to the child, later I regret my action and cry over it.			
24. I keep apologizing to the child whenever I think he's angry with me.			
25. I am constantly in tension that my family members may mistake me.			
26. I keep trying to please everyone in the family and in the process, I find I			

have no time for myself			
27. feel very happy that my family is totally dependent on me.			
28. If any family member talks well of any other family member I get completely put off.			
29. I want everyone in the family to appreciate me, reassure me that I am on the right path			
30. I insist on everyone to be perfect.			
31. I just cannot tolerate even a small deflection from perfection.			
32. I get easily put off when the child obeys others and not me			
33. If the child does not return from school on time. I get panicky.			
34. I insist on accompanying my child to every place he/she goes to despite his/her protest.			
35. The moment the child leaves home, I start visualizing and imagining that some bad incident has occurred and get totally panicky.			
36. I insist that the child should ring me up when he /she reaches their destination and ring me back when they start to leave			
37. I can never let my child go to a hostel.			
38. When the child misses his food even a little bit, get very worried			
39. I sometimes try to win the child by crying.			
40. I keep telling the child how great I am, how grateful he should be towards me for all I have done.			
41. I insist on proper loving behaviour on the part of the child for all I have			

done for him			
42. When i go to work or anywhere outside, my mind is always back home with the children and I just cannot enjoy the shopping etc			

APPENDIX E

Please read each of the items below and indicate whether you almost never, sometimes, often, or almost always think or do each one when you feel down, sad, or depressed. Please indicate what you *generally* do, not what you think you should do.

1-almost never

2-sometimes

3-often

4-almost always

1. Think "What am I doing to deserve this?"	Almost never	Sometimes	often	Almost always
2. Analyze recent events to try to understand why you are depressed				
3. Think "Why do I always react this way?"				
4. Go away by yourself and think about why you feel this way				

5. Write down what you are thinking and analyze it				
6. Think about a recent situation, wishing it had gone better				
7. Think "Why do I have problems other people don't have?"				
8. Think "Why can't I handle things better?"				
9. Analyze your personality to try to understand why you are depressed				
10. Go someplace alone to think about your feelings				

PROJECT REPORT

A STUDY TO ASSESS THE ASSOCIATION BETWEEN PERCEIVED PATERNAL PARENTING STYLE AND RESILIENCE AMONG YOUNG ADULTS

Submitted by:

REENA ELIZABETH BIJOY

Register No:

SB19PSY030

Under the guidance of

Asst. Prof. Vishnupriya V

In partial fulfillment of the requirement for award of the degree of

B.Sc. PSYCHOLOGY



ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Nationally Re-accredited at 'A++' (4th cycle)

Affiliated to: Mahatma Gandhi University

MARCH 2022

CERTIFICATE

This is to certify that the project report entitled, “A STUDY TO ASSESS THE ASSOCIATION BETWEEN PERCEIVED PATERNAL PARENTING STYLE AND RESILIENCE AMONG YOUNG ADULTS”, is a bonafide record submitted by Ms. REENA ELIZABETH BIJOY, Reg.no. Reg.no. SB19PSY030, in partial fulfillment for the award of the Degree of Bachelor of Psychology during the academic year 2019-2022.



Ms. Bindu John

Head of Department

Department of Psychology

St. Teresa's College, Ernakulam



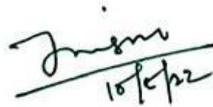
Ms. Vishnupriya V

Assistant Professor

Department of Psychology

St. Teresa's College, Ernakulam

External Examiner:



10/1/22

DECLARATION

I, REENA ELIZABETH BIJOY, hereby declare that the study presented in the dissertation entitled, “A STUDY TO ASSESS THE ASSOCIATION BETWEEN PERCEIVED PATERNAL PARENTING STYLE AND RESILIENCE AMONG YOUNG ADULTS”, which is submitted to the Department of Psychology, St. Teresa’s College, Ernakulam is a bonafide record of the research work carried out by us, under the supervision and guidance of Ms. Vishnupriya V, Assistant Professor, Department of Psychology, St. Teresa’s College, Ernakulam, in partial fulfillment of the requirements for the degree of Bachelor of Science in Psychology and has not previously formed the basis for the award of any degree, diploma, fellowship, title or recognition before.

Place: Kochi

Reena Elizabeth Bijoy

Date

Register Number: SB19PSY030

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I am grateful to our parents, friends and classmates for their help during this project.

Thanking you,

Reena Elizabeth Bijoy

ABSTRACT

Project Title: A STUDY TO ASSESS THE ASSOCIATION BETWEEN PERCEIVED PATERNAL PARENTING STYLE AND RESILIENCE AMONG YOUNG ADULTS

Research Focus: YOUNG ADULTS IN AN INDIAN POPULATION

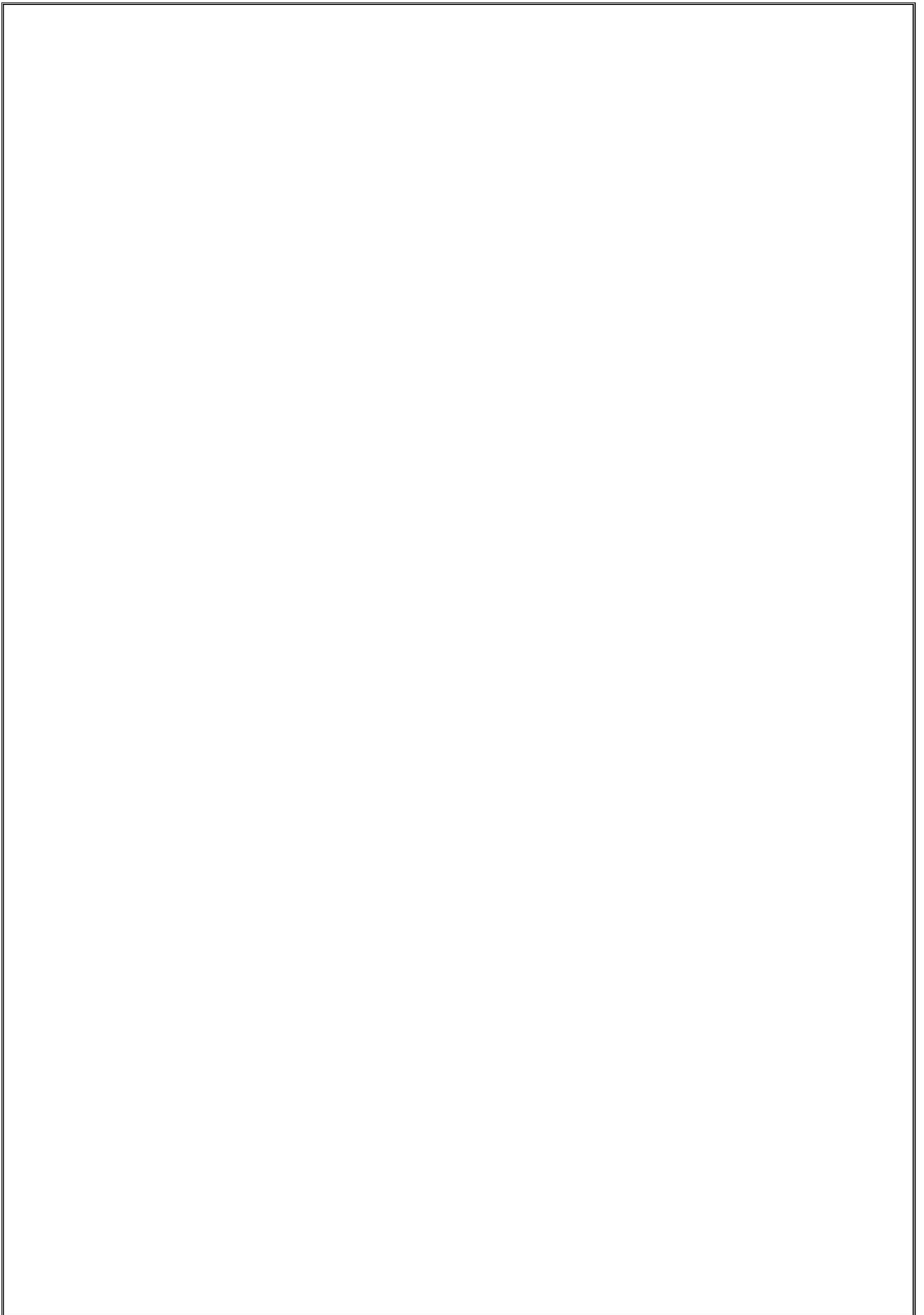
Although several studies have been done on the maternal influence on the child's ego-resilience, there is very little literature on the role of the father in the psychological development of the child. Parenting styles have a significant influence on the child's ability to react to various situations as they grow up. Baumrind (1970) identifies five different parental styles, namely, the authoritarian, the permissive, the authoritative, the traditional and the neglectful, based on two dimensions---parental demandingness and parental responsiveness. Three of these styles (authoritative, authoritarian and permissive) were chosen for the purpose of this study. In order to measure D. Baumrind's parental authority prototypes, we used the Parental Authority Questionnaire, a 30-item-per-parent questionnaire with scores derived from the children's phenomenological appraisal of their parents' authority style. The Brief Resilience Scale measures resilience in its original and most basic meaning: the ability to bounce back from difficult situations (Agnes, 2005). It consists of 6 items and is self-report in nature. Data collection was performed through a questionnaire combining the 2 measures on a random sample of 200 participants between ages 18 to 35. The Chi-Square test, Spearman's Correlation method and Mann-Whitney U-test were used to for statistical analysis. Results reveal no significant association between paternal parenting style and resilience at 0.05 level of significance

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CHAPTER I
INTRODUCTION



Parental behavior is one of the primary external factors that determine the status of the child's mental health through adolescence and adulthood. In fact, positive parental behaviour has been shown to correlate positively with the child's mental health (Roosa, Wolchik and Sandler, 1997) and contribute significantly to the self-esteem of the growing individual. Beyond simply being a positive influence, the style of parenting, which is the set of attitudes and beliefs used in parenting, also affects the child's psychological and behavioral adjustment in life. The aim of our study is to understand whether parenting styles, specifically the father's, is a predictor of resilience in children. Mothers and fathers play different roles in the development of a child; traditionally, mothers are more involved in the daily lives of the child, while fathers provide material support and play a role in influencing the child's gender role. Nowadays, both parents share more or less equal roles in parenting. Paternal involvement in the child's life is associated with their healthy development. In this study, we focus on resilience as an important outcome of an individual's relationship with their fathers. Resilience is the process of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances (Sandler, Wolchik, Mackinnon, Ayers and Roosa 1997).

1.1 BACKGROUND OF THE STUDY

As psychology students, we study human behavior and cognitive function, in particular, personality. The personality of an individual is a unique combination of qualities and characteristics that differentiates one individual from another. One particular trait can have an influence over multiple others and one such trait is 'resilience', the ability to bounce back from adversities. This encompasses attributes like self-compassion, emotional awareness and regulation, survivor mentality and so on. There are numerous ways in which this trait develops in a person, however, the root lies in social support and the primary source is the parents and the kind of bond and support extended on their part. This brought us to parenting styles. The practice of parenting a child is viewed differently by individuals and has changed significantly over time. Nowadays, there is much importance given to the kind of parenting engaged in, in order to create a strong and healthy future for our society.

It is undeniable that both parents have a significant impact on the child, whether or not they chose to be involved. However, most of the burden of child-raising is placed on the mother. Whether a child is successful or not, it is the mother's parenting style and capabilities that get questioned. The father's role is limited to being the breadwinner. Hence, when given an

opportunity to do research as part of our degree, we decided to focus on the impact of paternal parenting on the development of a crucial part of personality, the resilience of an individual (Kathy Watson, 2006). Even while going through literature on the topic, there were very limited information available on the role of a father in building the resilience of the child.

1.2 PROBLEM STATEMENT

To understand whether resilience is associated with paternal parenting style among young adults between ages 18 to 35.

1.3 NEED AND SIGNIFICANCE OF THE STUDY

Difficulties and setbacks are fundamental to life. It allows an individual to gain insight, understand themselves, others, and their surroundings and is an integral part of learning and growing as a person. Changes in the modern era have aimed to make life comfortable but the number of people stressed and burned out is drastically higher than those in the past. In such a situation, there need to be much effort put into preparing a person to face these stressors of life. This basic quality of being able to maintain peace with oneself and others in the face of hurdles and finding a way out of it is what is termed 'resilience'. This particular trait is not innate. It is the result of various biological, social and other protective factors. One of the most significant factors is parenting. Parents differ drastically in their views on parenting a child and this is reflected in their style of parenting. There are said to be five different parenting styles but this is condensed to three. One needs to identify the best kind of parenting style so that there will be more awareness for people everywhere. The amount of materialistic goods that can be given to make a child's life better is bounded and often has limited impact. However, qualities like resilience that lasts throughout one's life equips them to face their life and the problems that come with it.

1.4 SCOPE OF THE STUDY

The current study examines how paternal parenting style is a successful predictor of resilience in participants. Positive parental behavior has proven to positively correlate with a child's mental health (Roosa, Wolchik and Sandler, 1997). The aims and beliefs with which a parent raises their child, also known as parenting style, has a significant impact on the child's psychological adjustment and well-being. According to Diana Baumrind (1971), there are

five parenting styles, however, for the purpose of this study we will be looking at three--- authoritarian, authoritative and permissive. The father plays a significant role as the main contributor to the child's sense of security and as a provider of material support. They also influence the child's perception of their gender identity. The study aims to understand the role a father's parenting style, as perceived by the participants, plays on the development of resilience, which is the process of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances (Sandler, Wolchik, Mackinnon, Ayers and Roosa 1997). In our study, we examine resilience as the ability to bounce back from stressful situations.

We employ a 36-item questionnaire, which includes the Parental Authority Scale and the Brief Resilience Scale, to 200 participants ranging from 18 to 35 years of age. Our primary data collection is through snowball sampling via a Google form. The cross-sectional study will continue till we have enough data to make inferences about the relationship between perceived paternal parenting style and resilience.

Through the study, we have the opportunity to investigate the literature done by various researchers on the role of parents in the development of various personal characteristics of the child such as resilience and coping. Our research will give us a better understanding of the current trend of parenting among young adults---traditionally, Indian parents were stereotyped as 'authoritarians'; however, there have been changes to this perception as a result of modern parenting where both parents play a complementary role in child-rearing. We will explore the need for a more rational and positive style of parenting for the psychological adjustment of the child as well as whether gender will play a role on the impact of these parenting styles on the child. Finally, our study provides a theoretical framework to educate parents and guide them to reflect on and critique their own parenting styles and focus on practical applications of positive parenting to improve their child's resilience and well-being.

1.5 OBJECTIVES OF THE STUDY

- To understand the relationship between resilience and paternal parenting style
- To find out whether resilience is dependent on paternal parenting style.
- To explore whether resilience is different between males and females in the study.

1.6 LIMITATIONS OF THE STUDY

Our study has some limitations within which our findings need to be interpreted carefully.

Some limitations of the study are mentioned below.

1. Firstly, the results of this study may not be completely generalizable as the sample was restricted to 200 participants and this may affect the understanding of significant relationships in the data.
2. Secondly, there is a lack of previous research studies on our research objectives and therefore, very little theoretical foundation to the exploration of our hypothesis.
3. Thirdly, since our primary data collection mode is through a Google form, in an uncontrolled setting, participants may not sincerely answer all the questions due to factors like time constraints, fatigue, boredom, etc., or give accurate responses that reflect their perceptions of the variables in the study.
4. Finally, as the results are specific to an Indian population, this study does not apply to other cultural settings nor investigate their impact on the variables.

Studies examining the role of the father's involvement in the child's mental health are plenty; but our study aims to zero in on two specific variables, through our analysis of previous research---parenting style and resilience. To achieve our research objectives, we have made our questionnaire concise and viable with 36 items that are direct, easy to read and interesting to answer.

CHAPTER II
REVIEW OF LITERATURE

2.1 LITERATURE REVIEW

Parenting Style

Parenting style is a constellation of parents' attitudes and behaviours toward children and an emotional climate in which the parent's behaviours are expressed (Darling and Setinberg, 1993). Xinwen Bi, Yiqun Yang, Hailei Li, Meiping Wang, Wenxin Zhang and Kirby Deater-Deckard (2018) investigated the associations between parenting styles and parent-adolescent relationship factors and explored whether adolescent gender moderated these factors.

According to results, for adolescent's expectation for behavioural autonomy, the main effect of parenting style was significant; adolescents of authoritative parents reported the lower level of expectation for behavioural autonomy compared to other parenting styles. In this study done by Farahnaz Mirzaei and Hasanali Kadivarzane (2013), a correlational and cross sectional analysis was done to investigate the relationship between parenting styles and hardiness in high school. It is well established in the psychological world that parents play a critical role in children's psychological and behavioural well-being. The parental climate in which a child grows up influences the way in which children mobilise their competencies to cope with difficult situations (Punamaki, Quota & El-Sarraj, 2001). According to the results of the correlational analysis, there is a negative and significant relationship between hardiness and parenting style, i.e. as hardiness increases, parenting style is reduced. However, another finding of this research is that hardiness has a positive correlation with authoritarian parenting style. Several studies have shown that attention from parents and positive parenting reduces adolescents' problem behaviours such as delinquency and substance abuse. This study also highlights the importance of congruent parenting of both parents for the child's internal development. A confounding variable may be the degree of mothers' participation and equal parenting, which needs to be investigated further.

The research was done by Samiullah Sarwar (2016) published in the Journal of Education and Educational Development determined the influence of parents and their parenting styles. The analysis of the literature reveals that the authoritarian parenting style is more appropriate for young children to prevent them from delinquency since such parents focus on limiting the child's autonomy along with the parent-child relationship. Natasha Kritzas and Adelene Ann Grobler (2005) investigated the relationship between perceived parenting styles and resilience in adolescence. Adolescence is a particularly stressful period of development where

developmental changes related to coping occur against various types of stressors. The research indicated a significant negative correlation between a mother's and a father's authoritative style and dysfunctional coping strategies in female and male adolescents. The study also confirmed the findings that positive parenting behaviour is an external factor that correlates positively with the adolescent's resilience. Derya Sari Cenk and Ayhan Demir (2015) investigated the optimism levels of Turkish adolescents aged between 14 and 18 and their relation with parenting style, gender and academic achievement. According to the results of the current study, a parent's warmth, acceptance and supportiveness is more effective on a child's optimism level than strict control, coercion or complete permissiveness.

Larry A. Hjelle, Elizabeth A. Busch and John E. Warren (1996) explored the relationship between two cognitive personality constructs---explanatory style and dispositional optimism--and self-reported maternal and paternal parenting behaviour. The results of the self-report experiment showed that dispositional pessimism was associated with self-reports of mothers as having been hostile, neglectful, and rejecting. P Manzeske and Anne Dopkins Stright (2009) examined the relations between maternal parenting styles and young adults' emotional regulation with participants from a large Midwestern university. Results showed that for highly warm and behaviourally controlling, and averagely psychologically controlling mothers, their children had moderate emotional regulation; maternal behavioral and psychological control and young adult emotion regulation were negatively correlated. Sahitya, S. M. Manohari and Raman Vijaya (2019) investigated the association between parenting styles and children's development in India. The study conducted by Masayo Uji, Ayuko Sakamoto, Keiichiro Adachi and Toshinori Kitamura (2013) investigated the validity and reliability of the Japanese version of the Parental Authority Questionnaire (PAQ) and examine whether children's later mental health is influenced by the way parental authority is exercised. The results of the study confirmed the three-factor structure of the J-PAQ. Maternal authoritative parenting decreased risk to self and others. The results of the study confirmed the three-factor structure of the J-PAQ. Maternal authoritative parenting decreased risk to self and others. The results of the experiment show that Baumrind's authoritative parenting style could negatively predict early maladaptive schemas in the area of rejection or disconnection; authoritarian parenting style was found to be a good predictor of schemas in the areas of other-direction and rejection/disconnection. The study conducted by Nancy Eisenberg, Lei Chang, Yue Ma and Xiaouri Huang (2009) examined the relations of authoritative parenting and corporal punishment to Chinese first and second graders' effortful

control (EC), impulsivity, ego resilience, and maladjustment, as well as mediating relations. The results of the study show that the relationship between the variables is similar in the US and in China, e.g. the relation of parenting to children's ego resilience was mediated by EC (effortful control) and/or impulsivity, and ego resilience mediated the relations of EC and impulsivity to internalizing problems.

Resilience

Mary Karapetian Alvord and Judy Johnson Grados (2005) wrote on *Enhancing Resilience in Children: A Proactive Approach*. There is still much debate as to what behaviour accounts for the term resilience. Some of the most important contributing factors includes the nature of individuals, families and culture. There exist protective factors that help people deal more effectively with stressful events and mitigate risks in families and communities. Individuals high in resilience are most likely those who take an active part in overcoming difficulties. Such individuals also have the ability to adapt quickly according to the situation. The Alvord–Baker social skills group model uses the protective factors and provides a practical, proactive, cognitive– behavioural approach to enhance resilience in children. These procedures can be introduced by clinicians, along with the active participation of the children and their parents, resulting in an integrated approach that helps develop and enhance resilience. The progress made in this kind of study needs to be periodically revised due to the dynamic nature of the environmental and individual factors.

Odin Hjemdal, Patrick A. Vogel, Stian Solem, Kristen Hagen and Tore C. Stiles (2010) conducted a study on *The Relationship between Resilience and Levels of Anxiety, Depression, and Obsessive–Compulsive Symptoms in Adolescents*. Mental disorders are likely to be caused by multiple risk factors and processes rather than singular causes. Thus, the identification of a causal risk factor will contribute to elucidating only one aspect of a more complex matrix of causes. Condition like Obsessive Compulsive Disorder stands out from the usual emotional disorders due to the absence of a clear antecedent. Depressive and anxiety symptoms on the other hand are related to internalizing problems. The results from the current study illustrates how a measure of resilience may facilitate understanding of the relation between level of psychopathological symptoms and protective factors. The presence of protective factors such as the availability of sources of social support outside the family, as

well as perceived levels of family cohesion, etc. is associated with lower levels of stress and psychiatric symptoms. For the total resilience score, there were no gender differences, but there were, however, it did exist for three of the subscales of resilience.

Linda C. Theron and David R. Donald (2011) elaborated on educational psychology and developing context (A rejoinder to Toland and Cardigan). The resilience theory argues that it's not the nature of adversity that is most important, rather how we deal with it. The works of Tolland, Carrigan and more has brought light to the fact that resilience is rooted in complex and dynamic processes. This includes 'basic human adaptational systems' (Masten 2001). It could include numerous systems like intelligence, self- regulation, attachment, meaning- making, etc, depending not only on the individual factors but also environmental factors such as the social context. This implies that it is not only the child as an individual entity that is at fault when resilience isn't achieved but also the social factors like the school, teachers, family, culture etc. that leads to the issue. Hence, educational psychologists are urged to focus more on the 'social ecology of resilience'. Bullying refers to aggressive goal-directed behaviour that harms another individual within the context of a power imbalance. It takes various forms such as name calling, hitting, isolation, spreading humiliating rumours and sending insulting messages by phone. Maria Sapounaa and Dieter Wolke studied (2013) explored Resilience to bullying victimization: The role of individual, family and peer characteristics. The influence of family relationships on the long- term outcome of student bully victims has only been studied recently. The current study revealed significant gender differences emerged for depression, delinquency, emotional and behavioural resilience, self-esteem, sibling victimization and parental conflict. Results indicated that adolescents who experienced no or low levels of conflict with their parents were more likely to report low levels of depression and delinquency following bullying victimization.

There are many views that define resilience but the most accepted one is that resilience is not a personal or innate characteristics, rather a process revealed as a result of interaction of several factors in case of one's experiences in difficulty. Various factors associated with this quality includes family, school and the environment where the individual lives. Emine Erdogana , Oznur Ozdoganb and Mehmet Erdogan (2014) devised the following study- University Students' Resilience Level: The Effect of Gender and Faculty- to assess university

students resilience level and to reveal the association of this level with faculty type and gender. Overall, it was found that the effect of faculty type on resilience was not significant. But faculty affect was only significant for the subs-scale of leadership in favour of the students in the faculty of education. On the other hand, the effect of gender on resilience was statistically significant in favour of male students. Elham Atighi , Atefeh Atighi and Iman Atighi (2015) explored on the resilience of adolescent girls based on parenting styles. A resilient person can effectively deal with adversities, be it mental, emotional or physical, and quickly return to pre- crisis state. This is key to the understanding of other psychological factors like motivation and emotions. It is a quality of much significance especially during adolescence, a period of much turmoil. Family setting and parenting styles exerts a great influence on the development of reliance in children. The present study takes a correlative-descriptive approach. It was concluded that there is a significant and positive relation between resiliency and authoritative parenting style. The authoritative parenting style involves setting reasonable expectations of the child while also listening to the child, showing kindness and friendliness, and encourages participation in family decision making. This kind of parenting style is considered most effective. The strictness and authority shown are usually judged as appropriate and requires even by the children. The adolescents learn to inhibit their behaviour by the healthy boundaries set by parents, not falling into the influence of peers. Additionally, authoritative parenting style has been found to have a negative relation with personality disorders. Nicholas A. Livingston, Nicholas C. Heck, Annesa Flentje, Hillary Gleason, Kathryn M. Oost, and Bryan N. Cochran (2015) investigated on Sexual Minority Stress and Suicide Risk: Identifying Resilience through Personality Profile Analysis. A sexual minority is a group whose sexual identity, orientation or practices differ from the majority of the surrounding society. Suicide is the third leading cause of death among adolescents and young adults within the United States, with the sexual minority being much more susceptible. This is linked to the experience of stressors like victimization, concealment, etc. this leads to psychological and behavioural mechanisms, such as social isolation, emotion regulation (e.g., coping, rumination), and cognitive processes (e.g., hopelessness, pessimism). This strengthens the relation between minority stressors and negative outcomes. Sexual minority-based victimization is emphasized in the current study. The results indicated that individuals of sexual minority identified as possessing an adaptive personality profile were more resilient in the face of victimization as it relates to the likelihood of attempting suicide. It was also demonstrated that resilience (e.g., flexibility and social aptitude) among the younger population is associated with lower neuroticism and

higher agreeableness, conscientiousness, extraversion, and openness to experience.

Adolescence is referred to as a difficult or a crucial stage because it is a stage of transformation, both in physical and psychological development. The teenagers are required to overcome multiple transformations so a vital trait during this time is Resilience or the ability to bounce back during or after difficult times. This enables them to manage and learn from experiences. Empathy is a quality that undergoes extensive development during this period. It teaches them to reflect, observe and think about their own behaviour which enables them to appreciate the feelings of others. Seema Vinayak and Jotika Judge (2018) investigated on how Resilience and Empathy are Predictors of Psychological Wellbeing among Adolescents. One of the objectives of the current study was to find the relationship between resilience, empathy and psychological well-being. It was observed that empathy and resilience showed a positive relation to psychological wellness whereas, resilience and empathy have the higher correlation as compared to their correlations with psychological well-being. Additionally, gender differences were found on resilience and empathy while no gender difference exists on psychological well- being.

The presence of a chronic illness is known to be extremely stressful, not just for the patient, but also the people surrounding the individual, especially the family. One study by Maria Calpes, Anne Marie Martin, Caroline Dalton, Lynne Maresh, Eileen Savage, George Knafl and Marcia Van Riper (2018) examined adaptation and resilience in families of individuals with down syndrome living in Ireland. This condition is a genetic disorder characterised intellectual disability, loss of cognitive functions and distinct physical anomalies. Results indicated that such families can attain resilience. There were several crucial factors associated with the development. These included things like effective communication, family hardiness, etc. With timely interventions, these families could lead a productive life. Resilience refers to the ability to bounce back from adversity or any sort of negative emotional experience. Optimism is the belief that the future holds positive outcomes. It contributes to resilience and is key to how individuals adapt to stressful events. When confronting challenges, optimists show more resilience, even if progress is difficult and slow. There is a reciprocal relationship between these two, i.e., optimism leads to resilience and resilience results in more optimism.

Resilience and Parenting Style

The interaction between a child and his family plays a significant role in the development of various aspects of personality. More importantly, the child's perception of the family member's behaviour and actions played a significant role in various aspects of their behaviour. Jiwon Cho, Jung Hee Ha and Juliet Jue (2020) explored on the difference between mother's and children's perception of parenting style and its influence. It was observed that the mothers perceived themselves to be more rational and affectionate than did the child. Mothers of these children had significantly higher rates of depression and low resilience. The study conducted by Hamidreza Zakeri, Bahram Jowkar, and Maryam Razmjooe (2010) investigated the relationship between parenting styles and resilience on 350 college students. The results of the present study showed there was a positive and significant correlation between acceptance-involvement parenting style and resilience. Kathryn E. Williams, Joseph Ciarrochi, Patrick C. L. Heaven (2012) examined the longitudinal relationships between perceived parenting style and psychological flexibility among students in a self-report manner. The study also showed that mother and father variables did not differ in how they predicted psychological flexibility. A study by Elhalm Atighi, Atefeh Atighi and Iman Atighi (2015) looked into predicting psychological resilience in girls based on the parenting styles used. Resiliency is an especially important factor when it comes to maintaining a proper balance in the face of stressful circumstances. Family plays a critical role in the development of resilience in each child. Research showed positive correlation between parenting style and resilience in both authoritative and authoritarian parenting style but an inverse relation for permissive parenting style.

2.2 RESEARCH GAP

The current study uses chi-square test and correlative technique, both of which are used to check for the existence of an association between the two variables. Personality traits like resilience are known to be influenced by multiple other extraneous factors like environmental experiences. Personal qualities like the need for acceptance, the closeness of the child to parents, family cohesiveness, etc. can affect the outcome. Previous research has not tried to understand how these variables may relate to an Indian population, where there is may be cultural factors affecting the relationship between the themes under study. There is also very little research on paternal parenting style as opposed to maternal parenting style and their

impact on the psychological well-being and resilience of the child.

The study focuses exclusively on the effect of perceived paternal parenting style on the resilience of a child. It is not possible to predict which parent plays a greater role in the development of a child, in the current context.

CHAPTER III
THEORETICAL FRAMEWORK

THEORETICAL FRAMEWORK

Through this study we will be investigating the impact of Baumrind's parenting styles on the emotional resiliency among young adults between the ages 18 and 35. The aims and beliefs with which a parent raises their child, also known as parenting style, has a significant impact on the child's psychological adjustment and well-being. According to Baumrind (1971), there are three types of parenting styles---an authoritarian parent is low in responsiveness and high in demandingness – is disciplinarian, strict and limits the child's autonomy, a permissive parent is high in responsiveness and high in demandingness – imposes no rules and regulations on their child's behaviour, while an authoritative parent is demanding but also equally receptive to the child's needs. Resilience is examined not just as the ability to recover from illness, but as the ability to bounce back from difficult situations. We employ a 36-item questionnaire, which includes the Parental Authority Scale and the Brief Resilience Scale, to 200 participants ranging from 16 to 50 years of age. Our primary data collection is through snowball sampling via a Google form. The cross-sectional study will continue till we have enough data to make inferences about the correlational relationship between perceived paternal parenting style and resilience.

3.1 PARENTING STYLES

A parenting style is a psychological concept representing fixed strategies that parents use in raising their children. The quality of parenting can be more essential than the quantity of time spent with the child. For instance, the parent may be engaging in a different activity and not demonstrating enough interest in the child. Parenting styles are the representation of how parents respond to and make demands on their children. Parenting practices are specific behaviours, while parenting styles represent broader patterns of parenting practices. There are various theories and opinions on the best ways to rear children, as well as differing levels of time and effort that parents are willing to invest. Parents' styles reflect attitudes toward discipline and parental responsibilities, as well as establish expectations for children. These are conveyed through parental body language, tone of voice, emotional displays, and quality

of attention, in addition to the content of what parents say to their children and their overall behavior toward them. Tracing the conceptual development of parenting styles research, Darling and Steinberg (1993) suggest that parenting styles ought to be considered within the context of how parents' behaviors and practices impact child development. Such impact is a function of parents' values and socialization goals, their attitudes toward children, and their specific parenting practices. Although not typically described using the framework of parent-child relationships, clearly parenting styles have a direct impact on such relationships as illustrated by the following descriptions of parenting styles and their effects on child behavior.

According to Harari (2005), psychologists endorse the concept that parenting is an essential component in fostering children's growth and development. Parents are expected to offer responsible caregiving as well as be invested and committed throughout their children's lives (Baumrind & Thompson, 2002). According to Baumrind, parenting style can be seen varying along two orthogonal dimensions of demandingness and responsiveness. When crossed, these two dimensions yield four parenting styles:

- Authoritative - responsive and demanding
- Authoritarian - demanding but not responsive
- Permissive - responsive but not demanding
- Rejecting-neglecting - neither demanding nor responsive

Based on the review of the literature, authoritative parenting styles have been associated with many successful child developmental outcomes. Permissive and authoritarian parenting styles have not been found to have these same positive effects on child outcomes.

3.2 RESILIENCE

The APA defines resilience as the process of adapting well in the face of trauma or tragedy, threats, or other significant sources of stress (Southwick et al., 2014). It is what people call 'bouncing back.

This does not mean that a resilient person doesn't feel the same level of emotion as any regular person. It simply means that they have the capacity to deal with problems more effectively and get back on time quicker than the average person, despite the troubles they go through. Problems are faced head-on.

There are several qualities that every resilient person has. These are:

1. Self-compassion- this refers to the sympathy and understanding one shows themselves. Although many might consider this as something common, this is something that is hard to see these days. Especially with the increasing use of social media, people find it easy to undermine themselves and their values. Constant comparison with unrealistic standards makes it harder to appreciate oneself.
2. Social support- resilient people understand the importance of having a social support group. This may be a small circle but the bond is very strong and more than enough to give them a feeling of security and belongingness, especially during the time of a crisis.
3. Effective emotional regulation- most people struggle to contain their emotions during stressful times. Resilient people also go through the same emotions but they possess the understanding that these feelings are only temporary and it will pass.
4. Feeling of control- individuals high in resilience have a strong locus of control. They act on the belief that it is their actions that will determine their future.
5. Problem-solving skills- a resilient person looks at problems in an objective manner, making sure they find rational solutions to deal with their issues. They rarely have emotional outbursts.
6. A survivor mentality - this frame of mind empowers an individual, making them focus on surviving a dreaded situation rather than becoming a victim. Our resilience changes over time and with the situation. It is often various situations that shape it. There will be instances in which individuals feel like they are the only ones being left behind and other times when people manage to surprise themselves with how well they manage a difficult situation. There are various kinds of resilience a person requires while dealing with stressors. These include:
 - Physical resilience- refers to how effectively the body can adapt to changes and also includes its ability to heal from injuries, physical demands, etc. This is the easiest to build up for most people as it comes with a healthy lifestyle.
 - Emotional resilience- involves the ability to regulate one's emotions at a stressful time. It is quite difficult to maintain one's peace at a stressful time. A person high in this finds it possible to maintain an optimistic view of life. They are aware of their innermost thoughts and feelings and hence find it easy to predict and control the flow of emotions.

- Mental resilience- refers to the capacity to understand uncertain situations and adapt quickly to change. They use logic to make sense of their situation and use isn't hesitant to seek help If required.
- Social/ community resilience - refers to the ability of a group to recover from stressful situations. This includes the ability to seek and provide assistance for those in need. For instance, when a community comes together to restore houses and previous living conditions after a tornado strikes.

3.3 THEORIES

Diana Baumrind's Parenting Styles:

In her research, Diana Baumrind found what she considered to be the four basic elements that could help shape successful parenting: responsiveness vs. unresponsiveness and demanding vs. undemanding. Parental responsiveness refers to the degree to which the parent responds to the child's needs in a supportive and accepting manner. Parental demandingness refers to the rules which the parent has in place for their child's behaviour, the expectations for their children to comply with these rules, and the level of repercussions that follow if those rules are broken. Through her studies Baumrind identified three initial parenting styles: authoritative parenting, authoritarian parenting and permissive parenting. Maccoby and Martin expanded upon Baumrind's three original parenting styles by placing parenting styles into two distinct categories: demanding and undemanding.

Bowlby's Attachment theory:

Attachment is the strong, affectionate tie we have with special people in our lives that leads us to experience pleasure and joy when we interact with them and to be comforted by their nearness in times of stress. According to Bowlby, the infant's relationship with the parent begins as a set of innate signals that call the adult to the baby's side. Over time, a true affectionate bond forms, supported by new emotional and cognitive capacities as well as by a history of warm, sensitive care. Attachment develops in four phases: pre-attachment, attachment-in-the-making, clear-cut attachment and formation of a reciprocal relationship. There are four main types of attachment: secure, insecure, resistant, and disorganized.

Dr Norman Garmezy's Resilience Theory:

Garmezy defines resilience as a function that reflects the capacity to recover and maintain adaptive behavior that may follow initial retreat or incapacity upon initiating a stressful event. He discards the earlier held view that considered resilience a quality that made individuals resistant to the effect of stress. He also insisted that the presence of resilience didn't imply that someone is superior to another.

Various factors were said to play a role in the development of this trait. The key factors include: Individual factors- the overall personality and temperament of an individual determines the resilience shown in the face of adversity. The unique blend of traits such as optimism, problem-solving skills, objectivity, etc, determines how well one is equipped to face challenges.

- Familial factors- includes the level of cohesion, support, love, and understanding shown among family members.
- Support factors- includes support given to an individual, outside his/ her family. This commonly includes friends, teachers, coaches, religious groups, etc.

Michael Rutter Theory:

Rutter defined resilience as, "An interactive concept that is concerned with the combination of serious risk experiences and a relatively positive psychological outcome despite those experiences". According to this view, it is not simply the psychological factors that determine a person's ability to cope with the challenges of life, rather it is the availability of resources needed to overcome a particular situation. An individual cannot be resilient while facing different types of problems. People have the tools to adapt to some situations and not others. Resilience is determined by the nature of a crisis and the resources possessed.

CHAPTER IV
RESEARCH AND METHODOLOGY

RESEARCH AND METHODOLOGY

A research methodology involves specific techniques adopted in the research process to collect, organize and evaluate data. It is used to verify a theory and test its application along a specific set of academic standards. It describes the tools and measures used to gather data for the topic under study.

This chapter provides a description of the objectives of the study, the hypothesis, the research design, sources of data collection, method of data collection, sample size and data analysis method.

4.1 OBJECTIVES

- The main objectives of the study are to find the relationship between perceived paternal parenting style and resilience among young adults, and understand whether resilience is dependent on paternal parenting style.
- The secondary objective is to investigate whether resilience is distributed differently between males and females in the study.

4.2 HYPOTHESIS

1. Resilience is dependent of Paternal Parenting Style
2. There is a relationship between Paternal Parenting Style and Resilience among the participants
3. There is a significant difference in gender between males and females

4.3 RESEARCH DESIGN

The research design used in this study is descriptive and correlational research, which is a type of non-experimental research method where a researcher observes two/more variables in order to understand the relationship between them without any influence from extraneous variables. However, it does not test the cause-effect relationship between the variables. It is ideal for gathering data quickly and generalizing the findings to real-life situations.

4.4 SOURCE OF DATA

The data collected is primary in nature. The study procedure consisted of collecting data by the way of online survey.

4.5 SAMPLE DESIGN

The sample under consideration covers 200 individuals in the age range 18-35.

4.6 SAMPLE SIZE

A sample size of 200 young adults were chosen through non-probability convenient sampling from readily available population.

4.7 SAMPLING METHOD

Convenience sampling method, which is a form of non-probability sampling method, focuses on collecting primary data from participants who are readily accessible to the researchers, i.e., researchers can subjectively select people at random who would be happy to participate in the research. The sample can be found anywhere---at malls, schools, online communities, etc. This is a useful technique for pilot testing and hypothesis generation, with its advantages being that it can speed up the research process and the researcher does not have to invest too many resources to collect the sample.

4.8 METHOD OF DATA COLLECTION

For the purpose of our research, we created a Google form of our questionnaire, which was circulated to our target population who were conveniently accessed online. A sample of 200 participants including male and female were collected from young adults in the Indian population between ages 18 and 35. The sample was selected on the basis of the inclusion-exclusion criteria.

Inclusion criteria for the sample:

1. Individuals within the age and of 18 and 35
2. Individuals who are Indian in nationality
3. Individuals who have knowledge of English

Exclusion criteria for the sample:

1. Individuals above the age of 35 and below the age of 18.

2. Individuals outside of India
3. People with no knowledge of English

4.9 DRAFTING QUESTIONNAIRE

The online survey included two parts: The Parental Authority Questionnaire and the Brief Resilience Scale.

Scales:

Parental Authority Questionnaire (Parenting Style)

Baumrind (1971) proposed three distinct patterns of parental authority (permissiveness, authoritarianism, and authoritative) and measured these parenting styles through interviews with parents and their children and through observations of parents interacting with their children. Two forms of the questionnaire were constructed to evaluate the parental authority of mothers and of fathers, 30 items each. The results of these studies showed the PAQ to have highly respectable measures of reliability and validity. The PAQ should be useful for assessing the parental authority exercised by both mothers and fathers and it is appropriate for both females and males who are older adolescents or young adults. The PAQ has three subscales: permissive (P: items 1, 6, 10, 13, 14, 17, 19, 21, 24 and 28), authoritarian (A: items 2, 3, 7, 9, 12, 16, 18, 25, 26 and 29), and authoritative/flexible (F: items 4, 5, 8, 11, 15, 20, 22, 23, 27, and 30). Mother and father forms of the assessment are identical except for references to gender. The PAQ is scored easily by summing the individual items to comprise the subscale scores. Scores on each subscale range from 10 to 50.

Brief Resilience Scale (Resilience)

The brief resilience scale (BRS) was created to assess the ability to bounce back or recover from stress. The 6 item scale was developed to assess a unitary construct of resilience, including both positively and negatively worded items. The possible score range on the BRS is from 1 (low resilience) to 5 (high resilience). Items 1, 3, and 5 are positively worded, and items 2, 4, and 6 are negatively worded. The BRS is scored by reverse coding items 2, 4, and 6 and finding the mean of the six items. To calculate the score, add the responses varying from 1-5 for all six items giving a range from 6-30---then divide the total sum by the total number of questions answered.

4.10 DATA ANALYSIS TECHNIQUE

The data collected through the questionnaire was analysed using the IBM SPSS ver. 25.0.

The Pearson's Chi-Square Test & Spearman's Correlation Coefficient was used to examine the association between paternal parenting style and resilience. The Chi-Square Test of Independence determines whether there is an association between categorical variables (i.e., whether the variables are independent or related). It is a nonparametric test. This test utilizes a contingency table to analyse the data. A contingency table (also known as a cross-tabulation, crosstab, or two-way table) is an arrangement in which data is classified according to two categorical variables. The categories for one variable appear in the rows, and the categories for the other variable appear in columns. Each variable must have two or more categories. Each cell reflects the total count of cases for a specific pair of categories. Additionally, the Chi-Square Test of Independence only assesses associations between categorical variables, and cannot provide any inferences about causation.

The Spearman rank-order correlation coefficient (Spearman's correlation, for short) is a nonparametric measure of the strength and direction of association that exists between two variables measured on at least an ordinal scale. The test is used for either ordinal variables or for continuous data that has failed the assumptions necessary for conducting the Pearson's product-moment correlation. Your two variables should be measured on an ordinal, interval or ratio scale. A monotonic relationship exists when either the variables increase in value together, or as one variable value increases, the other variable value decreases. It is also worth noting that a Spearman's correlation can be used when your two variables are not normally distributed.

Finally, the Mann-Whitney U-Test was conducted to investigate the distribution of resilience across categories of gender. In statistics, the Mann-Whitney U test is a nonparametric test of the hypothesis that a variable is distributed equally over two categories of a 2nd variable.

CHAPTER V
DATA ANALYSIS

DATA ANALYSIS

Analysis and interpretation are crucial steps of any research program. It is the process by which we make sense and meaning of the data collected and determine the conclusions, significance and implications of the findings.

Table 1

Normality testing of the variables Parenting Style and Resilience

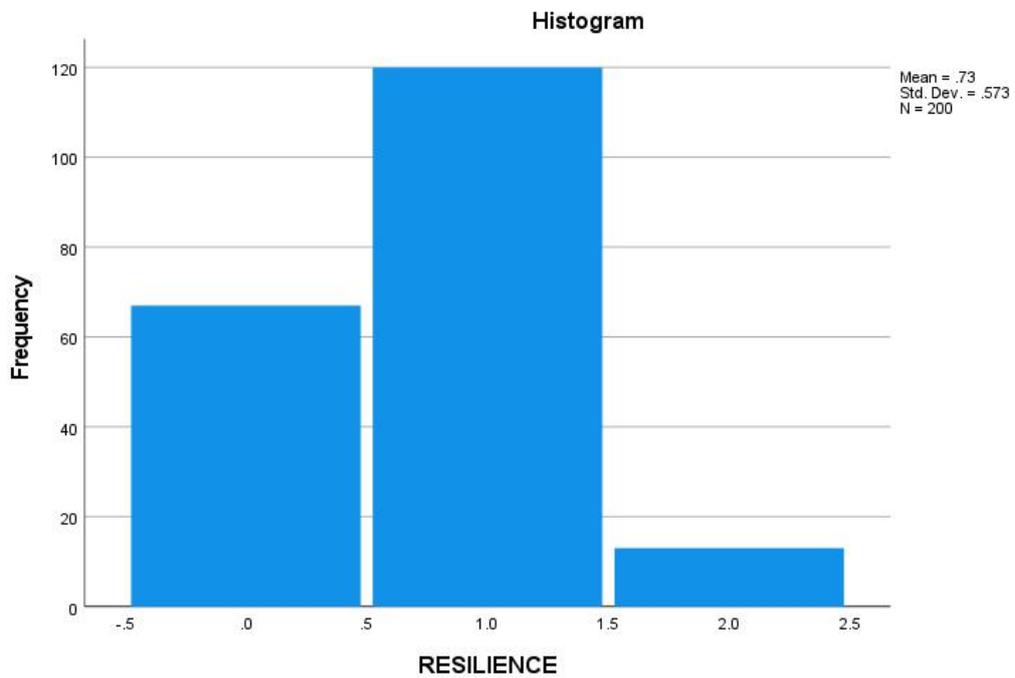
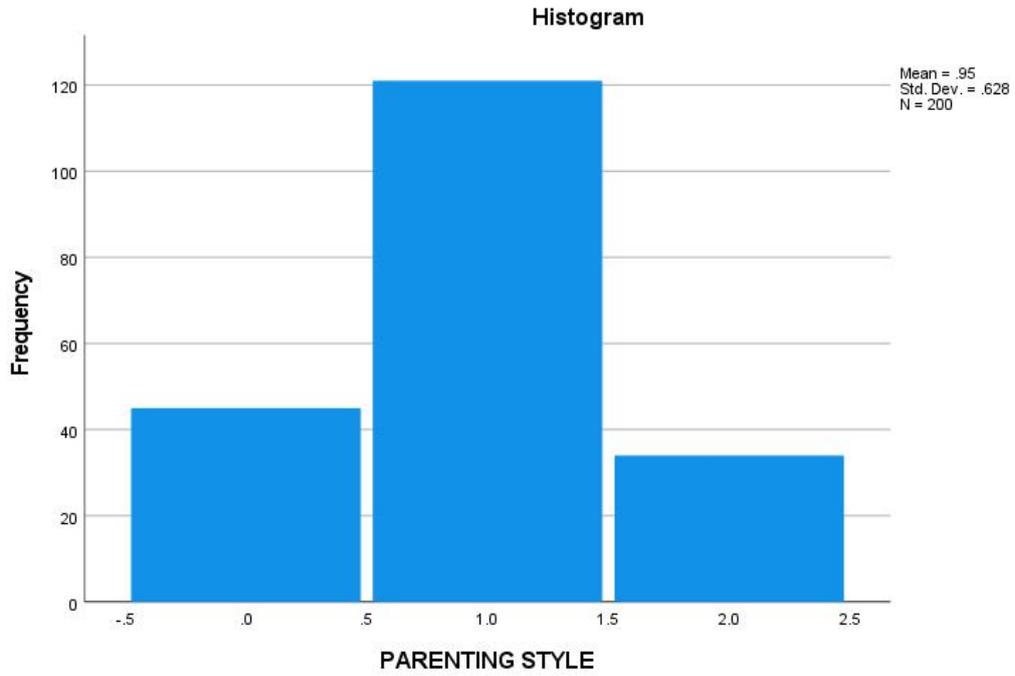
Case Processing Summary

	Valid		Missing		Total	
	N	Percen	N	Percen	N	Percen
		t		t		t
PARENTING STYLE	200	100.0 %	0	0.0%	200	100.0 %
RESILIENCE	200	100.0 %	0	0.0%	200	100.0 %

Test of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statisti	Df	Sig.	Statisti	df	Sig.
	c			c		
PARENTING STYLE	.310	200	<.001	.780	200	<.001
RESILIENCE	.346	200	<.001	.737	200	<.001

a. Lilliefors Significance Correction



Since the p value for Parenting Style and Resilience is $<.001$ which turns out to be much less than significance level (0.05) in the Kolmogorov-Smirnov test for Normality, it is concluded

that the variables used in this study do not have a normal distribution (as evident from the histograms of each).

Table 2 & 3

Pearson’s Chi-Square Statistic between paternal parenting style and resilience in the participants.

Chi-Square Tests

Pearson Chi-Square	3.806 ^a	4	.433
Likelihood Ratio	3.600	4	.463
N of Valid Cases	200		

a. 2 cells (22.2%) have expected count less than 5.

The minimum expected count is 2.21.

Parenting Style * Resilience Crosstabulation

		Resilience			Total	
		H	L	N		
Parenting Style	AN	Count	2	13	19	34
		Expected Count	2.2	11.4	20.4	34.0
	AV	Count	6	37	78	121
		Expected Count	7.9	40.5	72.6	121.0
	P	Count	5	17	23	45
		Expected Count	2.9	15.1	27.0	45.0

Total	Count	13	67	120	200
	Expected	13.0	67.0	120.0	200.0
	Count				

The Pearson Chi-square coefficient was computed to assess the association between paternal parenting style and resilience. Authoritative parenting style seems to have the highest association with normal level of resilience in the participants and does not relate significantly to high levels of resilience. Permissive style seems to have a higher association with normal level of resilience while authoritarian style seems to have more or less similar association with low and normal levels of resilience. Although individual category results are such, since the Chi-square statistic (3.806) is much greater than the designated alpha level (0.05), the hypothesis (that parenting style is dependent of resilience) is rejected.

Note: for the Chi-square test to be fully accurate, less than 20 per cent of cells must have an expected count of at least 5. Since there are two counts with score less than 5, further alternatives, like collecting larger sample, may be considered. In this case, the likelihood ratio was checked to ascertain whether the hypothesis can be accepted. Since its values (.463) is much bigger than designated alpha value (0.05), the hypothesis can be rejected with confidence.

Table 3

Spearman's Correlation Coefficient between paternal parenting style and resilience in the participants.

Correlations

			PARENTING STYLE	RESILIEN CE
Spearman's rho	PARENTING STYLE	Correlation Coefficient	1.000	-.018
		Sig. (2-tailed)	.	.796

	N	200	200
RESILIENCE	Correlation Coefficient	-.018	1.000
	Sig. (2-tailed)	.796	.
	N	200	200

The Spearman correlation coefficient was computed to assess the strength of the relationship between paternal parenting style and resilience. There seems to be a negative correlation between these two variables at .05 significance level (2 – tailed), however, since the p-value (.796) is greater than alpha value (0.05), the hypothesis is rejected, i.e., it is concluded that there is no relationship between perceived paternal parenting style and resilience. In a similar study done by Dr Manju Gera & Jasjit Kaur (2015) to study resilience and parenting styles, the results revealed an insignificant correlation between parenting style and resilience.

Table 4

The Mann-Whitney U Test was conducted to investigate the distribution of resilience across categories of gender.

	Test	Sig. ^{a,b}
1	Independent-Samples Median Test	.219
2	Independent-Samples Mann-Whitney U Test	.131

Since asymptotic significance is less than 0.05, the hypothesis (the distribution of resilience score is not the same across male and female genders) is rejected. In the study done by Dr Manju Gera & Jasjit Kaur (2015) to study resilience and parenting styles, it was found that there was no significant difference between resilience of male and female populations.

CHAPTER VI
FINDINGS

FINDINGS

The aim of the study is to understand whether parenting styles, specifically the father's, has a relationship with resilience in young adults in India between ages 18 and 35. Mothers and fathers play different roles in the development of a child; traditionally, mothers are more involved in the daily lives of the child, while fathers provide material support and play a role in influencing the child's gender role. Nowadays, both parents share more or less equal roles in parenting. Paternal involvement in the child's life is associated with their healthy development. In this study, we focus on resilience as an important outcome of an individual's relationship with their fathers. Resilience is the process of, capacity for, or outcome of, successful adaptation despite challenging or threatening circumstances (Sandler, Wolchik, Mackinnon, Ayers and Roosa 1997).

In order to measure D. Baumrind's parental styles prototypes, the Parental Authority Questionnaire, a 30-item-per-parent questionnaire with scores derived from the children's phenomenological appraisal of their parents' parenting style, was used. The Brief Resilience Scale measures resilience in its original and most basic meaning: the ability to bounce back from difficult situations (Agnes, 2005). It consists of 6 items and is self-report in nature. Data collection was performed from 200 participants through convenience sampling via Google by combining the 2 measures.

First, normality testing was conducted to see if the variables are normally distributed over the population. The Kolmogorov-Smirnova coefficient was 0.310 for Parenting Styles and 0.346 for resilience. Since the p value for Parenting Style and Resilience is $<.001$ which turns out to be much less than significance level (0.05) in the Kolmogorov-Smirnov test for Normality, it is concluded that the variables used in this study do not have a normal distribution, therefore, non-parametric testing was used for our study.

Results from the Chi-Square Test for Independence reveal no significant association between resilience and parenting style. Since the Chi-square statistic (3.806) is much greater than the designated alpha level (0.05), the hypothesis is rejected. Resilience is independent of paternal parenting style. Based on the data analysed, high resilience is less frequently associated with all three types of parenting. The expected count for people with High Resilience and Authoritarian Parenting Style is 2.2, which is greater than the observed count (2). For people

with Low Resilience and Authoritarian Parenting Style, the E.C (11.4) is lesser than observed count (13). For people with Normal Resilience and Authoritarian Parenting Style, the E.C (20.4) is greater than observed count (19). The expected count for people with High Resilience and Authoritative Parenting Style is 7.9, which is greater than the observed count (6). For people with Low Resilience and Authoritative Parenting Style, the E.C (40.5) is greater than observed count (37). For people with Normal Resilience and Authoritative Parenting Style, the E.C (72.6) is greater than observed count (78). The expected count for people with High Resilience and Permissive Parenting Style is 2.9, which is lesser than the observed count (5). For people with Low Resilience and Permissive Parenting Style, the E.C (15.1) is lesser than observed count (17). For people with Normal Resilience and Permissive Parenting Style, the E.C (27) is greater than observed count (23). Authoritative style has the highest 'normal' level of resilience according to Chi-square test. Since the Chi-square coefficient is significantly higher than the alpha value (0.05), the hypothesis that resilience is dependent of parenting style is rejected.

A Spearman's correlational analysis was also done to measure the strength of the relationship between the two variables, if any. There seems to be a negative correlation between these two variables at .05 significance level (2 – tailed), however, since the p-value (.796) is greater than alpha value (0.05), the hypothesis is rejected. There is no relationship between perceived paternal parenting style and resilience.

The Mann-Whitney U Test was conducted to investigate the distribution of resilience across categories of gender. The significance level is .050 and the asymptotic significance was displayed as .131. Since asymptotic significance is less than 0.05, the hypothesis, i.e., the distribution of resilience score is not the same across categories of Gender, is rejected. In the study done by Dr Manju Gera & Jasjit Kaur (2015) to study resilience and parenting styles, it was found that there was no significant difference between resilience of male and female populations

Previous studies like the one done by Kathryn E. Williams, Joseph Ciarrochi, Patrick C. L. Heaven (2012) that examined the longitudinal relationships between perceived parenting style and psychological flexibility among students in a self-report manner showed that mother and father variables did not differ in how they predicted psychological flexibility. A study by Elhalm Atighi, Atefeh Atighi and Iman Atighi (2015) looked into predicting psychological

resilience based on the parenting styles used. Research showed positive correlation between parenting style and resilience in both authoritative and authoritarian parenting style but an inverse relation for permissive parenting style. The findings of the study are different from previous studies conducted on parenting style and resilience, taking into consideration that this study was conducted on an unequally distributed, Indian population where a phenomenological appraisal of paternal parenting style as opposed to maternal style (which is more popularly associated with the mental development of the child) was done, hence the results may be a result of the influence of factors outside our two variables.

CHAPTER VII
RECOMMENDATIONS

RECOMMENDATIONS

Resilience, or the ability to bounce back, is a personality trait that has been linked to parenting styles in multiple studies. In particular, Baumrind's parenting styles were used to categorize the nature of parenting beliefs, attitudes and behaviour into three- permissive, authoritarian and authoritative. Most studies have concluded that the authoritative parenting style is linked to higher levels of resilience in children. The current study focuses exclusively on the Indian population. Findings of the same indicate that there is no significant association between paternal parenting styles and resilience in the chosen sample. More research is needed on the topic to arrive at a reliable conclusion. Studies relating to the impact of parenting styles, especially on the development of resilience in a child, are extremely limited in the Indian context. Most of the available information focuses exclusively on the role of maternal parenting style. Traditionally, caring for a child is considered to be the responsibility of mothers. However, the role of fathers in the development of a child is of equal importance.

Qualitative research needs to be undertaken in order to explore the complexities of this topic. The personality traits of an individual cannot be taken apart and studied independently. One trait is related to another, hence a holistic approach needs to be employed. Resilience is a trait that is also significantly moulded by one's environment, so factors like major life events, socio-economic status, chronic illnesses in the family, living conditions, etc., need to be taken into consideration while studying the resilience of children. Additionally, children have varying degrees of attachment to the father and mother. That in itself could determine the impact of the parent's behaviour on traits like resilience.

CHAPTER VIII
CONCLUSION

CONCLUSION

The study at hand was conducted to understand the role of perceived paternal style as a predictor of resilience in young adults between ages 18 and 35. The main variables studied include parenting style - permissive, authoritarian & authoritative, and resilience. The objective of the study was to use paternal parenting style as a predictor of resilience in children. The Parental Authority Scale and the Brief Resilience Scale were used to measure the same. Both were filled out by young adults on the basis of a phenomenological appraisal of their father's parenting style. The data was obtained through snowball sampling via a Google form. Since the variables were not normally distributed, data were analysed using the Chi-square test and Spearman's correlation coefficient. The results show no significant relationship between any paternal parenting styles and high resilience in children. From the analysis, it can be concluded that resilience is independent of paternal parenting style among the participants.

REFERENCES

REFERENCES

- Alvord, M. K., & Grados, J. J. (2005). Enhancing resilience in children: A proactive approach. *Professional Psychology: Research and Practice*, 36(3), 238–245.
<https://doi.org/10.1037/0735-7028.36.3.238>
- Antonopoulou, K., Alexopoulos, D. A., & Maridaki-Kassotaki, K. (2012). Perceptions of father parenting style, empathy, and self-esteem among Greek preadolescents. *Marriage & Family Review*, 48(3), 293–309. <https://doi.org/10.1080/01494929.2012.665016>
- Author Pamela Li, M. S. (2021, August 7). *Resilience theory in psychology (definition & characteristics)*. Parenting For Brain. Retrieved April 27, 2022, from <https://www.parentingforbrain.com/resilience-theory/>
- Author Pamela Li, M. S. (2022, April 24). *4 types of parenting styles and their effects on the child*. Parenting For Brain. Retrieved April 27, 2022, from <https://www.parentingforbrain.com/4-baumrind-parenting-styles/>
- authors, A., & Hiromi Hirata <http://orcid.org/0000-0003-0730-4990> & Toshimitsu Kamakura. (n.d.). *The effects of parenting styles on each personal growth initiative and self-esteem among Japanese university students*. Taylor & Francis. Retrieved May 1, 2022, from <https://www.tandfonline.com/doi/full/10.1080/02673843.2017.1371614>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56–95.
<https://doi.org/10.1177/02724316911111004>
- Bi, X., Yang, Y., Li, H., Wang, M., Zhang, W., & Deater-Deckard, K. (1AD, January 1). *Parenting styles and parent–adolescent relationships: The mediating roles of behavioral autonomy and Parental Authority*. Frontiers. Retrieved May 1, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2018.02187/full>
- Bronte-Tinkew, J., Moore, K. A., & Carrano, J. (2006). The father-child relationship, parenting styles, and adolescent risk behaviors in intact families. *Journal of Family Issues*, 27(6), 850–881. <https://doi.org/10.1177/0192513x05285296>
- Cenk, D. S., & Demir, A. (2015). The relationship between parenting style, gender and academic achievement with optimism among Turkish adolescents. *Current Psychology*, 35(4), 720–728. <https://doi.org/10.1007/s12144-015-9375-1>
- Cherry, K. (n.d.). *How resilience helps when coping with challenges*. Verywell Mind. Retrieved April 27, 2022, from <https://www.verywellmind.com/what-is-resilience-2795059>

- Current theories relating to resilience and young people a ...* (n.d.). Retrieved April 27, 2022, from <https://evidenceforlearning.org.au/assets/Grant-Round-II-Resilience/Current-theories-relating-to-resilience-and-young-people.pdf>
- Eisenberg, N., Chang, L., Ma, Y., & Huang, X. (2009). Relations of parenting style to Chinese children's effortful control, ego resilience, and maladjustment. *Development and Psychopathology*, 21(2), 455–477. <https://doi.org/10.1017/s095457940900025x>
- Erdogan, E., Ozdogan, O., & Erdogan, M. (2015). University students' resilience level: The effect of gender and faculty. *Procedia - Social and Behavioral Sciences*, 186, 1262–1267. <https://doi.org/10.1016/j.sbspro.2015.04.047>
- Esmali Kooraneh, A., & Amirsardari, L. (2015). Predicting early maladaptive schemas using Baumrind's parenting styles. *Iranian Journal of Psychiatry and Behavioral Sciences*, 9(1). <https://doi.org/10.5812/ijpbs.952>
- Fayombo, G. (2010). Psychological resilience: Predictor of school-related variables among Caribbean adolescents. *PsycEXTRA Dataset*. <https://doi.org/10.1037/e621872010-001>
- Hasin, M., Saju, C. R., Mundodan, J. M., & Jini, M. P. (2019). The style of mothering and its determinants: A study among mothers of Lower Primary School Children. *International Journal Of Community Medicine And Public Health*, 6(2), 808. <https://doi.org/10.18203/2394-6040.ijcmph20190212>
- Hernández, P. (2002). Resilience in families and Communities: Latin American contributions from the Psychology of Liberation. *The Family Journal*, 10(3), 334–343. <https://doi.org/10.1177/10680702010003011>
- Hurley, K., Mooney, K., Sood, A., Kilroy, D. S., Kraft, A., Rauf, D., DiGiulio, S., & Landau, M. D. (n.d.). *What is resilience? definition, types, building resiliency, benefits, and resources*. EverydayHealth.com. Retrieved April 27, 2022, from <https://www.everydayhealth.com/wellness/resilience/#:~:text=Resilience%20is%20important%20because%20it,challenges%20and%20work%20through%20problems.>
- Kang, G., & Son, S. (2016). Relationships between parenting styles and adolescents' ego-resilience: The mediating role of fathers' parenting participation. *Indian Journal of Science and Technology*, 9(46). <https://doi.org/10.17485/ijst/2016/v9i46/107363>
- Lemay, R., Byrne, B. A., & Ghazal, H. (n.d.). Managing change: *Promoting Resilience in Child Welfare*, 316–336. <https://doi.org/10.2307/j.ctt1ckpc6v.23>
- Manzeske, D. P., & Stright, A. D. (2009). Parenting styles and emotion regulation: The role of behavioral and psychological control during young adulthood. *Journal of Adult Development*, 16(4), 223–229. <https://doi.org/10.1007/s10804-009-9068-9>

- Milevsky, A. (2018). Parenting styles. *Encyclopedia of Adolescence*, 2706–2711. https://doi.org/10.1007/978-3-319-33228-4_38
- Mirzaei, F., & Kadivarzare, H. (2014). Relationship between parenting styles and hardiness in high school students. *Procedia - Social and Behavioral Sciences*, 116, 3793–3797. <https://doi.org/10.1016/j.sbspro.2014.01.843>
- Sahithya, B. R., Manohari, S. M., & Vijaya, R. (2019). Parenting styles and its impact on children – a cross cultural review with a focus on India. *Mental Health, Religion & Culture*, 22(4), 357–383. <https://doi.org/10.1080/13674676.2019.1594178>
- Sapouna, M., & Wolke, D. (2013). Resilience to bullying victimization: The role of individual, family and peer characteristics. *Child Abuse & Neglect*, 37(11), 997–1006. <https://doi.org/10.1016/j.chiabu.2013.05.009>
- Sarwar, S. (2016). Influence of parenting style on children’s behaviour. *Journal of Education and Educational Development*, 3(2), 222. <https://doi.org/10.22555/joeed.v3i2.1036>
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, 15(3), 194–200. <https://doi.org/10.1080/10705500802222972>
- Souri, H., & Hasanirad, T. (2011). Relationship between resilience, optimism and psychological well-being in students of medicine. *Procedia - Social and Behavioral Sciences*, 30, 1541–1544. <https://doi.org/10.1016/j.sbspro.2011.10.299>
- Tavassolie, T., Dudding, S., Madigan, A. L., Thorvardarson, E., & Winsler, A. (2016). Differences in perceived parenting style between mothers and fathers: Implications for child outcomes and marital conflict. *Journal of Child and Family Studies*, 25(6), 2055–2068. <https://doi.org/10.1007/s10826-016-0376-y>
- Theron, L. C., & Donald, D. R. (2012). Educational psychology and resilience in developing contexts: A rejoinder to Toland and Carrigan (2011). *School Psychology International*, 34(1), 51–66. <https://doi.org/10.1177/0143034311425579>
- Turner, E. A., Chandler, M., & Heffer, R. W. (2009). The influence of parenting styles, achievement motivation, and self-efficacy on academic performance in college students. *Journal of College Student Development*, 50(3), 337–346. <https://doi.org/10.1353/csd.0.0073>
- Uji, M., Sakamoto, A., Adachi, K., & Kitamura, T. (2013). The impact of authoritative, authoritarian, and permissive parenting styles on children’s later mental health in Japan: Focusing on parent and child gender. *Journal of Child and Family Studies*, 23(2), 293–302.

<https://doi.org/10.1007/s10826-013-9740-3>

What is positive parenting? 33 examples and benefits. PositivePsychology.com. (2022, April 11). Retrieved April 27, 2022, from <https://positivepsychology.com/positive-parenting/>

Williams, K. E., Ciarrochi, J., & Heaven, P. C. (2012). Inflexible parents, inflexible kids: A 6-year longitudinal study of parenting style and the development of psychological flexibility in adolescents. *Journal of Youth and Adolescence*, *41*(8), 1053–1066.

<https://doi.org/10.1007/s10964-012-9744-0>

Zahed Zahedani, Z., Rezaee, R., Yazdani, Z., Bagheri, S., & Nabeiei, P. (2016, July). *The influence of parenting style on academic achievement and Career Path.* Journal of advances in medical education & professionalism. Retrieved May 1, 2022, from

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4927255/>

Zakeri, H., Jowkar, B., & Razmjooe, M. (2010). Parenting styles and resilience. *Procedia - Social and Behavioral Sciences*, *5*, 1067–1070.

<https://doi.org/10.1016/j.sbspro.2010.07.236>

APPENDICES

APPENDIX I:

BAUMRIND'S PARENTAL AUTHORITY QUESTIONNAIRE

Please choose the options that best express your feelings regarding each item in the questionnaire.

1= strongly disagree

2= disagree

3= neither agree nor disagree

4= agree

5= strongly agree

Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
1	2	3	4	5

Items:

1. While I was growing up my father felt that in a well-run home the children should have their way in the family as often as the parents do.
2. Even if his children didn't agree with him, my father felt that it was for our own good if we were forced to conform to what he thought was right.
3. Whenever my father told me to do something as I was growing up, he expected me to do it immediately without asking any questions.
4. As I was growing up, once family policy had been established, my father discussed the reasoning behind the policy with the children in the family.
5. My father has always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.
6. My father has always felt that his children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.
7. As I was growing up my father did not allow me to question any decision he had made.
8. As I was growing up my father directed the activities and decisions of the children in the family through reasoning and discipline.

9. My father has always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.
10. As I was growing up my father did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.
11. As I was growing up, I knew what my father expected of me in my family, but I also felt free to discuss those expectations with my father when I felt that they were unreasonable.
12. My father felt that wise parents should teach their children early just who is boss in the family.
13. As I was growing up, my father seldom gave me expectations and guidelines for my behavior.
14. Most of the time as I was growing up my father did what the children in the family wanted when making family decisions.
15. As the children in my family were growing up, my father consistently gave us direction and guidance in rational and objective ways.
16. As I was growing up my father would get very upset if I tried to disagree with him.
17. My father feels that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they are growing up.
18. As I was growing up my father let me know what behavior he expected of me, and if I didn't meet those expectations, he punished me.
19. As I was growing up my father allowed me to decide most things for myself without a lot of direction from him.
20. As I was growing up my father took the children's opinions into consideration when making family decisions, but he would not decide for something simply because the children wanted it.
21. My father did not view himself as responsible for directing and guiding my behavior as I was growing up.
22. My father had clear standards of behavior for the children in our home as I was growing up, but he was willing to adjust those standards to the needs of each of the individual children in the family.
23. My father gave me direction for my behavior and activities as I was growing up and he expected me to follow his direction, but he was always willing to listen to my concerns and to discuss that direction with me.

24. As I was growing up my father allowed me to form my own point of view on family matters and he generally allowed me to decide for myself what I was going to do.
25. My father has always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.
26. As I was growing up my father often told me exactly what he wanted me to do and how he expected me to do it.
27. As I was growing up my father gave me clear direction for my behaviors and activities, but he was also understanding when I disagreed with him.
28. As I was growing up my father did not direct the behaviors, activities, and desires of the children in the family.
29. As I was growing up I knew what my father expected of me in the family and he insisted that I conform to those expectations simply out of respect for his authority.
30. As I was growing up, if my father made a decision in the family that hurt me, he was willing to discuss that decision with me and to admit it if he had made a mistake.

APPENDIX II:

BRIEF RESILIENCE SCALE

Please choose the options that best express your feelings regarding each item in the questionnaire.

1= Strongly disagree

2= disagree

3= neutral

4= agree

5= strongly agree

S. NO	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I tend to bounce back quickly after hard times.	1	2	3	4	5
2	I have a hard time making it through stressful events.	5	4	3	2	1
3	It does not take me long to	1	2	3	4	5

	recover from a stressful event.					
4	It is hard for me to snap back when something bad happens.	5	4	3	2	1
5	I usually come through difficult times with little trouble.	1	2	3	4	5
6	I tend to take a long time to get over setbacks in my life.	5	4	3	2	1

INFLUENCE OF OTT PLATFORM DURING COVID SCENERIO IN ERNAKULAM DISTRICT

Project Report

Submitted by

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Under the guidance of

Ms. SHANA XAVY

In partial fulfilment of requirements for award of the degree of

Bachelor of Commerce



**ST.TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM
COLLEGE WITH POTENTIAL FOR EXCELLENCE**

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CERTIFICATE

This is to certify that the project report title **INFLENCE OF OTT PLATFORM DURING COVID SCENERIO IN ERNAKULAM DISTRICT** submitted by **REKHA VA, SANTHWANA XAVIER, SONA SEBASTIAN** towards partial fulfilment of the requirements for the award of degree of **Bachelor of Commerce** is a record of bonafide work carried out by them during the academic year 2021-22

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Place: Ernakulam

Date: 31.3.2022



DECLARATION

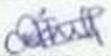
We, Rekha VA, Santhwana Xavier, Sona Sebastian hereby declare that this dissertation entitled, 'INFLUENCE OTT PLATFORM DURING COVID SCENERIO IN ERNAKULAM DISTRICT' has been prepared by us under the guidance of Ms. SHANA XAVY, Assistant Professor, Department of Commerce, St Teresa's College, Ernakulam.

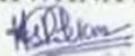
We also declare that this dissertation has not been submitted by us fully or partly for the award of any Degree, Diploma, Title or Recognition before.

Place: ERNAKULAM

Date: 31.3.2022


REKHA V A


SANTHWANA XAVIER


SONA SEBASTIAN

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REKHA V A

SANTHWANA XAVIER

SONA SEBASTIAN

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

OTT stands for “Over The Top” and refers to any streaming service that delivers content over the internet. OTT is a platform that delivers movies and TV series/shows over the internet, unlike traditional cable TV. There are multiple factors which have fuelled this rapid growth and the unfortunate health pandemic COVID-19 has proved beneficial for OTT platform. These OTT platforms are the same as any other apps or services available on the internet, all you need is a device that supports OTT and an internet connection and BOOM.

There has been an exponential growth in video-on-demand platform in Ernakulam. Hotstar, Netflix, Amazon prime have become big name business and likewise we have new participants. It can access video content through OTT apps for the viewers in any Internet-connected devices like a smartphone, smart tv, tablet, laptop etc.it makes easy for anyone to watch movies.

The present study is conducted to know the audience preference and influence of OTT platform.

1.2 SIGNIFICANCE OF THE STUDY

The shift from conventional media to over-the-top (OTT) media, particularly in the lockdown period due to the covid-19, has resulted in war between streaming service providers to attract and retain customers. This study aims to investigate the impact of covid-19 on OTT platform. It also studies the transformation of streaming in landscape preferences for consumers for various OTT platforms and the growth of OTT platforms during the pandemic. There is a need of study on usage and impact of OTT platforms among the people. This study analyse the viewing habit including the time spent by customers on such platforms, the type of content, amount spent on such platforms and types of OTT platforms preferred by them.

1.3 SCOPE OF THE STUDY

Over-the-top (OTT) service is the future of entertainment and music industry in India. After the penetration of 4G internet services in India, there is a sudden boom and rise of demand of OTT platforms. At the same year Netflix, Amazon Prime Sony, Disney came to India and started commissioning content. This study aims to

understand the uses and impact of content among the people during the pandemic. It is found during the study after covid-19 the people are more into OTT platforms watching contents. The area under study is people of Ernakulam district. It also studies future growth and scope of the OTT platforms.

1.4 PROBLEM STATEMENT

Since the outbreak of covid-19 and the consequent national lockdown, the usage of Over the Top (OTT) platforms has significantly increased in India. The growing popularity of video streaming has made a substantial impact on the traditional streaming channels during pandemic times. The purpose of this study is to examine the competition, coexistence and competitive superior the of OTT and traditional streaming channels in proving consumer satisfaction. This study aims to address this research gap. It studies about the attitude of the people regarding the OTT platform or traditional streaming channels. It also addresses the problem faced by the theatre owners during the pandemic.

1.5 OBJECTIVES

The following are the objectives of the study:

- This study aims to understand the trends in over-the-top content consumption as pertains to lockdown amidst COVID-19 out break in India, the reasons for its prevalence over the traditional entertainments media and the implication it may have on media market and industry in the long run.
- To study the key trends around OTT adaption due to Covid-19 in India.
- To study popularity of OTT media platforms and analyses the comparative audience preference towards OTT and TV
- To analyses the future perception of customer towards OTT Platform
- To understand the future scope of the OTT platforms.
- Satisfaction Level of subscribers of OTT platform

1.6 METHODOLOGY

1.6.1 RESERCH DESIGN

The research mainly focus on collecting Data from the respondent using questionnaire and analysis of data in order to arrive at a conclusion .The data was

analyzed using basic statistical tool. The data collection was primary and secondary in nature. The total sample size for this research study was respondents. The this research paper the data collection was done through primary and secondary medium

1.6.2 COLLECTION OF DATA

- **Primary data-** Primary data for the project are collected by supplying questionnaires among the respondents within the study
- **Secondary data-** Secondary data are collected from books, internet, and newspapers

1.6.3 SAMPLE DESIGN

Sampling technique used for this study is convenience sampling. Convenience sampling is a type of non- random sampling used for collecting samples of the target population that meet certain practical criteria like geographical location, easy accessibility or the willingness to participate are included for the purpose of study.

Population- The population considered under this study is limited to Ernakulum district

Sample Size- A sample of 215 respondents was taken by supplying the questionnaire

The methodology of the study has been summarized in a tabular form as shown below:

Sources of data	Primary and secondary data
Sample Size	215 responses
Area	Residence of Ernakulum district
Sampling design	Convenient sampling
Sources of primary data	Questionnaires
Sources of secondary data	Internet, journals, newspapers
Tools of analysis	Tabular and Graphical presentation used

1.6.4 TOOLS FOR ANALYSIS:

The collected data are analysed with the help of statistical tools like Percentage analysis is the method to represent raw data as a percentage for better Understanding of collected data. Percentage refers to a special kind of ratio which is used to make comparison between two or more series of data.

1.7 LIMITATIONS

- Out of total number of population only 215 number of population were able to be included in the study
- Sometimes, the busy schedules of people restricted the data collection
- Lack of previous studies in the research area
- The study was conducted based on the responses of the people so it may contain sampling errors
- Response of the people is not enough to get a a inclusion and they were not co-operate enough for the study
- Constraints of a particular location

1.8 KEYWORDS

- **Conventional media** -Conventional media is common form of marketing and spreading information through Television, Radio, and Newspaper. While socialmedia is innovative form of marketing and spreads information through Internet and Social networking channels like Facebook, twitter
- **Streaming service providers**- An online provider of entertainment (music, movies, etc.) that delivers the content via an Internet connection to the subscriber's computer, TV or mobile device.
- **OTT platform**- An over-the-top media service is a media service offered directly to viewers via the Internet. OTT bypasses cable, broadcast, and satellite television platforms, the types of companies that traditionally act as controllers or distributors of such content.
- **Streaming Media**- Streaming media is multimedia that is delivered and consumed in a continuous manner from a source, with little or no intermediate storage in network elements. Streaming refers to the delivery method of content, rather than the content itself.

1.9 CHAPTERISATION

Chapter 1- Introduction: This chapter contains brief introduction of the topic, its scope and significance, problem statement, methodology adopted, keywords, limitations and chapterization of the study.

Chapter 2- Review of Literature: This chapter includes review of earlier studies related to startups.

Chapter 3- Theoretical Framework: This chapter consists of concepts and, together with their definitions and reference to relevant scholarly literature, existing theory that is used for the particular study.

Chapter 4 - Data analysis and interpretations: In this chapter datas are analysed and interpreted based on various observations from the respondents.

Chapter 5- Summary, Findings and Recommendations: It is the summary of the findings and recommendations. It contains the final conclusion of the study.

CHAPTER 2
REVIEW OF LITERATURE

2.1 INTRODUCTION

A **literature review** is an overview of the previously published works on a specific topic. Either way, a literature review is supposed to provide the researcher/author and the audiences with a general image of the existing knowledge on the topic under question. A good literature review can ensure that a proper research question has been asked and a proper theoretical framework and/or research methodology have been chosen.

OTT platforms are gaining acceptance among viewers in the world, with an increasing number of film makers opting to stream movies on this medium since the outbreak of the Covid-19 pandemic last year. Making use of the situation, several new Over The Top (OTT) platform companies came into existence, and spread their footprint across world. Earlier, the OTT platforms were limited to cities. However, now it is available in every nook and corner of even villages. And the results are there for everyone to see. When people were restricted to their homes, they had no way to watch movies at theatres; naturally they moved towards Amazon Prime, Netflix, Disney+, Zee, Voot and other apps.

2.2 LITERATURE REVIEW

In this field, few studies and researchers were conducted, the researcher reviewed many researchers conducted in India and abroad to find out correct area of research work.

The Federal Communications Commission of the U.S. defines an OTT as an online deliverer of video content via the Internet (FCC, 2013). Bury and Li (2013) offered a big picture about the prosperity of online streaming services; digital video viewing dates back to the 1970s when Sony Corporation tried hard to promote its shortlived product, Betamax VCR (Greenberg, 2008). However, the subsequent emergence of digital video recording (DVR) around 1999 gradually earned a place in the U.S. market and popularized the trend of digital video watching.

According to IBEF, The OTT sector in India witnessed a 30% rise in the number of paid subscribers, from 22.2 million to 29.0 million between March and July 2020, due to Covid 19 led Lockdown. As per a recent study, most Indian viewers prefer watching regional language content, especially in Hindi, on the OTT

platforms. Hindi language content accounted for >50% of the overall streaming in April–July 2020. Overall, the top five metro cities accounted for 46% of the total OTT video platform users, while Tier I cities accounted for another 35% users in July 2020.

According to Redseer, the online content consumption in India grew 35% in April 2020 compared to January 2020. It further stated that shortform video content consumption recorded the most significant jump during the lockdown.

According to the Boston Consulting Group (BCG) and CII report, the average digital video consumption in India witnessed a 2X growth in the last two years. The report also mentioned that on average time spent in video consumption by Indians increased from 11 minutes to 24 minutes per day (as of November 2019)

The PWC Global Entertainment & Media outlook: 2020-2024 report revealed that OTT video content growth is happening from inside and outside the home due to proliferation of Smartphone devices and internet connected Television sets. Subscription VOD will be the prime driver of revenue, increasing at a 30.7 percent CAGR from US\$708 million in 2019 to US\$2.7 billion in 2024. The report said that India is the fastest-growing OTT market at 28.6 percent CAGR; to become the sixth-largest market in 2024. India's OTT market will overtake South Korea, Germany and Australia and become the sixth-largest market in 2024.

According to Purdy,(2018) The OTT market is a complex space dominated by three powerful players, - Netflix, Amazon Prime, Hulu - the Big 3. It is challenging for small players for finding their place in fierce market where content rules but more consumers can be dragged if they focus on providing curated content limiting account sharing, getting the price right and reducing churn through improved customer relations. The survey result indicates that although price is an important factor while purchasing OTT services, content still drives most consumer choices. A bread mix of quality content tends to be what consumers value from the Big 3, with "Access to the vast library of content" proved to be the top most reason users subscribe to these services. The small players who promises to provide the services, taking one of the above mentioned factors, are more likely to attract a big crowd for their subscription.

Article Singh, (2020) OTT platforms has experienced a surge in consumption and subscriber can't, impacted by the COVID-19. The recent survey by InMobi states that 46% viewers are watching more content online. According to the experts OTT services could grow further in upcoming days as the television channels run out of content. "As these channels have been unable to shoot due to lockdown, they are running old content. In such a scenario people will gravitate towards OTT to watch fresh content," says Paritosh Joshi, media consultant and principal, Provocateur Advisor. To benefit from this increase in demand platform such as Amazon Prime video and Zee5 have made few of their shows free to watch. Due to this, Zee5 has witnessed an 80% increase in subscription and over 50% time spend recently. Thrillers, urban drama and young romance are the top performing genres on the platform. The viewership for the movies has seen significant increase across the platforms. Cinema streaming services MIBI has seen 28% rise in viewership on its platform in March, compared to February.

Singh D. P., (2019) -The advent in Internet is changing the trend of Indian Cinema very rapidly. Reduced price of internet services lay the foundation for increase in OTT services like Netflix, Hotstar, Zee5, Amazon Prime and Alt Balaji. Many ventures are producing video content solely for these OTT services. These new ventures are changing the way of Indian Television and Cinemas. The OTT services analyses the video content watched by the users and keep providing them the content on similar genres. People liken to enjoy the services for free. Hence, OTT like Hotter provides very limited content for free. Also the subscription rates of these services are very low. The users enjoy the variety of International and national content. Action and Comedy are the favourite genres of movie. According to the survey, users spend on average, 2 hours a day watching OTT services. Web services are watched more often in OTT services. Genres like Young romance, action and urban-drama are into the top tier. Most of the users watch the content at night. Entertainment is the biggest reason behind the use of OTT. Second biggest reason behind the use is the mobility of the gadget. Third on its availability of content on demand

Dr.Sabyasachi Dasgupta and Dr. Priya Grover-study titled „UNDERSTANDING ADOPTION FACTORS OF OVER-THE-TOP VIDEO SERVICES AMONG MILLENNIAL CONSUMERS“ reiterates that Indian audiences have swayed towards OTT content and are willing to spend for easy and unlimited

access to content without a place and time limitation. It again notes the inverse impact of pricing strategy of OTT on its popularity. Data consumption is another attribute that makes it a tough choice for Indian viewers and so is habits and preferences for TV as a medium.

Paramveer Singh, paper finds that Netflix, Hotstar and Jio are most popular among Indian youth. The youth is skewed towards free trials available on these platforms, are nocturnal viewers and prefer web series format over films. The respondents affirm that over-the-top applications are changing media consumption patterns in India. The shift can be attributed to convenience of service, personalized experience and availability of global content etc. The study finds the future of OTT in India to be promising due to increasing smartphone penetration, economic convergence of media companies (take-overs/ mergers) at national or international level, and quality of reception of digital content. Also instrumental is the competitive internet data plans offered by telecom service providers in India.

Sidneye Matrix-Another study on Netflix observes that viewers, especially youth, are becoming active curators of content than couch potatoes taking in "whatever producers feed them." Supporting this paradigm shift in consumers is the need to share, stay connected and discuss the content on social media forums. In the process of these social media transactions, the viewers are setting new standards of expectations from producers thereby becoming an active catalyst in the production process too.

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Inc42.com indicated that India currently has 95 OTT platforms across video, music, podcast and audio streaming category. The average time spent by Indian users on OTT platforms has increased by 30-60% since early March 2020. Over the top (OTT) streaming platforms such as Disney+ Hotstar, ZEE5, Netflix, This trend is observed for all type of content including news (text), music (audio), or video. Increasing internet penetration and mobile device proliferation and convenience of consuming the content anytime, anywhere are the key drivers for this **Ghadiyal, (2011) based on a survey by FLYX, gathered in July and August 2020** - It was found that more than 50% of the respondents had purchased new subscriptions during the pandemic. According to the survey, Netflix is the most popular platform amazon and Hotstar. The most modern innovation that has significantly affected the development of OTT is mobile viewing. The arrival of technological devices such as smartphones, tablets, and ultra-books has challenged the boundary between new media and conventional television, reshaping the ways in which programs are both produced and watched

Vibhu Agarwal, CEO, and Founder, ULLU App says, “The pandemic has given a huge boom to all the OTT platforms. Much like other OTT platforms, we have also seen a significant surge in our footfall. More people are aware about ULLU and the content it offers. Normally, if 100 people download the app, 40 subscribe to

it. The conversation has always been at the range of 40-45 per cent. However, during lockdown, it went up to 75 per cent. So, we started seeing 75 subscriptions per 100 downloads

Park and Kwon, (2019) -The OTT platforms are transforming the relationship between media organizations and the structure of broadcasting industry. OTT platforms in major countries are using localization strategy, content differentiation strategy, partnership strategy and revenue enhancement strategy etc, to make OTT platforms more popular among common people

Rogers -It is identified that people who adopt an innovation earlier have different features than people who adopt an innovation later. When promoting an innovation to a population, it is important to understand the characteristics of the population that will help adoption of the innovation

Deloitte (2017) report on “Digital Media: Rise of On-demand Content” stated that the availability of affordable smartphones and better internet 4G connect people

has given rise to the demand for video on demand entertainment services. More people are now spending time on digital media compared to the cable or dish network.

ICFAI (2019) report on “Transition of Consumer towards Video Streaming Industry: A comparative analysis of Netflix and Amazon Prime.” mentioned that Content is said to be the king when it comes to on-demand video streaming channels and Netflix has slight edge over others in terms of content. Hotstar seems to be considerable choice because of the content it offers at affordable prices.

Mann et al., (2015) report “Digital Video & the connected consumer” notified that with 50% of smartphone app users aged between 18-24 years, the OTT media platforms are targeting a younger demographic.

CHAPTER 3
THEORETICAL FRAMEWORK

Over The Top(OTT) simply refers to any video streaming service delivering content to the users over the internet.it could also refered to subscription model whereby the platform charges the fees. Common examples of OTT platforms popular in India are Netflix, Amazon prime, Disney+hotstar, HBO now, Sonyliv, Zee5, Voot, Hulu, ErosNow etc.

3.1 Definition

It considered that internet access to programming independent of a facility or network dedicated to its delivery is the defining feature of what have been termed „over- the-top“ services.

3.2 A Brief history of OTT platform

The first dependent Indian OTT platform was BIG Flix, launched by Reliance Entertainment in 2008. In 2010, Digivive released India's first OTT mobile app called nexGTV, providing access to live TV and on-demand content. nexGTV is the first app to broadcast Indian Premier League games live on your smartphone in 2013 and 2014. IPL livestreaming since the acquisition of rights in 2015 has played a key role in the growth of yet another OTT platform, Hotstar (now Disney +). Hotstar In India.

OTT gained considerable momentum in India when both Ditto TV (Zee) and Sony Live were launched in the Indian market around 2013. Ditto TV was an aggregator platform broadcast from all media channels such as Star, Sony, Viacom and Zee.

3.3 Evolution of OTT platforms

The first OTT platform recognized and dependent on in India was BIGFLIX. It was launched by Reliance Entertainment in 2008 to meet the growing demand of the Indian digital market. BIGFlix has provided 2000 HD movies in 9 Indian languages including Punjabi, Hindi, Telugu, Malayalam, Gujarati, Marathi, Bhojpuri and Bengali. Launched by Digivive in 2010, India's first OTT mobile app nexGTV provides access to live TV and on-demand content. NexGTV was the first app to livestream Indian Premier League games on smartphones in 2013 and 2014. The OTT market showed slow growth until 2013. Significant growth in the OTT market began around 2013, when Ditto TV and Sony Live were launched to capture

increasing user demand. Zee Entertainment Enterprises Limited (ZEE)'s Ditto TV platform was a video-on-demand platform that allowed you to watch programs on all media channels, including Star, Sony, Viacom, ZEE and more. Launched in 2012, DittoTV has served international markets around the world. USA, UK, UAE, New Zealand, Australia etc. This service was integrated into ZEE5 on February 15, 2018. SonyLiv was launched on January 23, 2013 [3]. SonyLiv, India's popular entertainment video-on-demand service platform, is part of a network of television channels owned by Sony Pictures Networks India Pvt. In India Co., Ltd. Launched in India in 2016, Netflix is also one of the most popular streaming service providers. It is an American company headquartered at Los Gatos, California. It offers variety of award winning TV shows, movies, documentaries and Netflix originals. The best TV shows and web series liked by Indian audience are Sacred Games, Delhi Crimes, Stranger Things, Lust Stories, Ludo, Mismatched, Lucifer, Friends, Iron Fist, Extraction and Walking Dead etc. The monthly subscription plans start from 199 to 799 rupees. The company has shown an aggressive presence in Indian market with three forms of subscription plans i. B. Basic, Standard HD, Premium Ultra HD. Amazon Prime Video, simply called Prime Video, is also Amazon, the top video-on-demand streaming company based in the United States. com. It was launched in Bangalore, India on July 26, 2016. Initially, we offered our customers a 60-day free trial that was familiar to the service. The Mirzapur Web Series was the most anticipated and beloved show ever for Indian viewers. What's more, the top Amazon original series that Indian subscribers liked were Panchayat, Bandis Bandit, Inside Edge, Breathe, Paatal Lok, Jack Ryan, Made in Heaven, and Laakhon Main Ek. Amazon's original Paatal Lok won the "Best Web Series" at the 2020 Filmfare OTT Awards, and "The Family Man" won the Critics' Best Series Award. You can participate for 129 rupees a month and plan for 999 rupees a year. Amazon Prime offers a variety of TV shows, movies of different genres, and sections for children. The Hot Star, owned and operated by Star India, was launched in India on February 11, 2015. At that time, he had the streaming rights to the Indian Premier League. Both Star and Hot Star were acquired by The Walt Disney Company in 2019 and renamed Disney + Hotstar on April 3, 2020. Currently, we have VIP and premium subscription plans. VIP subscriptions can be purchased for 399 / year and premium subscriptions for 1499 / year. India has a huge fan base for the Marvel movie series, so there are advantages to combining it with Disney. Disney + Hotstar offers unlimited live sports programming, Hot Star Specials, Pre-TV Star Series, Multiplex

and New Indian Movies, English Shows, Disney + Originals. The Falcon & Winter Soldier, premiered on March 19, was well received by the Indian audience. In addition to these major players in the OTT market, ALT Balaji, JioCinema, Voot, and MX Player have a remarkable presence in the Indian market. They were all introduced between 2016 and 2019. Bhaukaal, Ek This Begam, Raktanchal and Aashram are MX Player's most popular web series with free subscriptions. Voot also provides 24-hour livestreaming access to Big Boss' most popular Indian TV shows. All of these OTT platforms have increased the demand for high quality, customer-friendly content. OTT provides a global platform to showcase talent in different parts of the world

3.4 Reasons of popularization

The OTT platform has revolutionized the media and entertainment industry in delivering high quality and diverse content. They provide the impetus to cover a huge audience around the world. Here's why these platforms are so popular:

3.4.1 Increased Internet and Smartphone Base

The growth in the customer base of smartphone users had started in 2015. The shift from 2G and 3G to 4G was the big reason for increasing the internet usage base in rural and urban areas of India. The internet user base exceeded the 500 million mark in 2019 and it is estimated that the user of internet enabled smartphones will be around 830 million by 2020 [4]. It has been generalized that 97 per cent of internet users in India prefers mobile phone for its use. The local manufacturing of smart phones and huge competition among various brands led to reduced price of smart phones. Large numbers of brands like Xiomi, Samsung, Vivo, Oppo, One Plus and Redmi have entered the market and provided a varied choice to the users at affordable cost. Rural India is also a great contributor of increasing demand of smartphones.

3.4.2 COVID as a power booster

Covid 19 truly acted as the power booster for OTT sector. Due to Lockdowns, people have stayed at home. Many of employees from different organizations allowed to work from their homes. Even the big screens were closed as they caused huge gatherings. First time lockdown was imposed on Month of March 2020 in India

and after that all the states independently imposed lockdowns to reduce down the cases in their particular states. Due to all these changes people become habitual to the new platforms of entertainment and subscription rates of OTT platforms risen up. Growing content availability on OTTs and lack of any other entertainment sources were the primary reasons for increased OTT screen time. 87 per cent of the people found that their screen time went up due to COVID.

3.5 Future of OTT platform

That's precisely how OTT platforms have revolutionized the viewing habits of modern consumers. The COVID19 pandemic has emerged as an important catalyst in shaping the future of the OTT platform. When quarantine swept the world in 2020, people relied on OTT content to maintain their involvement. Further escalation due to the closure of cinemas, malls and other resorts. Apart from the pandemic, another major factor influencing the future of OTT is the omnipresence of high-speed internet. It's made OTT services accessible to people living in remote areas, such as developing and underdeveloped countries. OTT players are now aware that offering a variety of consumption options will be beneficial in this market. These include options such as unlimited use in certain regions, different payment tiers for different services in developing markets, and affordable games in some regions. Content creators are coming up with new and innovative ways to attract consumers. Marketers are looking for new ways to reach consumers at the point of consumption. Marketers are also looking for ways to encourage consumers to buy immediately. Many players leverage AI capabilities to understand consumer interests and habits and create content that attracts individual users.

3.6 Types of ott platform

3.6.1 Netflix



Netflix is an American over-the-top content platform and production company headquartered in Los Gatos, California. Netflix was founded in 1997 and entered

india in January 2016 with a tons of exceptional and highly streamed original movies and shows such as Sacred games , stranger things and so on. Company's primary business is at subscription-based streaming service offering online streaming from a library of films and television series. In January 2021, Netflix reached 203.7 million subscribers . Netflix comes with different subscription plans namely mobile , Basic, standard and premium, which starts at Rs.149 a month. Netflix is a little bit costlier than other OTT platform so that they've started low-cost mobile only version of its service exclusively to India

3.6.2 Amazon prime



Amazon Prime video, Simply Prime video is an over the top streaming platform, headquarters on Seattle Washington, United States.. Amazon prime launched on September, 7 2006, as Amazon Unbox in US ,operating world wide but the service may require a full prime subscription.It provides various services as primarily distributes films and television series produced by Amazon Studios or licensed to Amazon, as Prime Originals (or Amazon Originals) or Exclusives, with the service also hosting content from other providers, content add-ons, live sporting events, and video rental and purchasing services..In india Amazon prime owns more than 2000 movies and more than 400 television shows and the OTT platform Prime Videos is known in India for its original web series such as Mirzapur, The Family Man, Tandav. Paatal Lok etc,. Usually Prime monthly subscription starts from Rs. 179 onwards

3.6.3 Disney Plus Hotstar



Hotstar (also known as Disney+ Hotstar) is an Indian brand of subscription video on-demand over-the-top streaming service and the most popular OTT platform in India launched on 11 February 2015 owned by Novi Digital Entertainment of Star India and operated by Disney Media and Entertainment Distribution, both divisions of The Walt Disney Company. The users can create their own account and can view the contents for free with advertisement because Disney Plus Hotstar is ideal for watching movies, live sports etc. Hotstar has more than 300 million monthly active users, making it the biggest streaming platform in India. Disney Plus alone has over 94 million subscribers worldwide, about 29% of which are from India. The Walt Disney Studios and Walt Disney Television, with dedicated content hubs for Disney, Pixar, Marvel, Star Wars, and National Geographic. In India, it also offers HBO, Showtime, live sports from Star Sports & ESPN, and select Hulu content. Unlike Disney Plus in other countries, 4K content on Disney Plus Hotstar is very limited.

3.6.4 Zee5



ZEE5 is an Indian subscription video on demand and over-the-top streaming service, run by Zee Entertainment Enterprises., launched in India on 14 February 2018 with content in 12 languages. ZEE5 mobile app is available on Web, Android, iOS, Smart TVs, among other devices. ZEE5 has about 56 million monthly active users in December 2019, ZEE5 was a late entrant to the group of OTT platforms but has made its own impact. Later, Zee5 India boasts 70 million+ downloads and has an active subscriber base around 0.5 million mark when it was launched 18 months ago. Most of the content, not all, is paid and Restricted to only ZEE5's premium users. Zee5 All Access Subscriptions in India start at Rs 99 per month. ZEE5 is the 6th downloaded app on the Google Play store among streaming platforms. The ZEE5 Premium Subscription is free for Airtel and Vodafone Idea prepaid users, but only some prepaid users have plans that include unlimited voice calls, data, SMS, and other benefits.

3.6.5 MX player



MX Player is an Indian video streaming and video on demand platform developed by MX Media & Entertainment, headquartered in Mumbai, India. MX Player is owned by Times Internet. It was released as a video player on July 18, 2011 and as OTT on February 20, 2019. With over 280 million users worldwide and over 150,000 hours of streaming libraries in 12 languages including English, Hindi and Tamil. MX Player provides syndicated users. Content with your own original. The platform currently runs on models that support ads and its service is completely free, but the Interferes with users by displaying many ads. Available for iOS, Android, and the web

3.6.6 Voot



Voot is an Indian subscription video on demand and over-the-top streaming service, owned by Viacom18, which also runs several TV channels in the country such as Colors, and produces films. launched in March 2016, headquarters in Mumbai, Maharashtra, India and it is available only in India, United States and United Kingdom, and hosts over 40,000 hours of video content that includes shows from channels like MTV, Nickelodeon and Colors. Contents of Voot is available in different languages like Kannada, Marathi, Malayalam, Tamil etc. In February 2020, Voot introduces paid subscription service called Voot Select. Voot Original series are made available only to paid subscribers. Initially the streaming services are completely free of cost but now the company has introduced different plans starting at Rs 99. It is available as an app for iOS, KaiOS (JioPhone) and Android users, and a website for desktop Consumption.

3.6.7 HBOMAX



HBO Max is an American subscription-based video on demand service owned by AT&T's WarnerMedia through its WarnerMedia Direct subsidiary, . It's services started in United States on 27 may 2020.The original plan for the service called for three tiers with a late 2019 launch. Randall L. Stephenson, chairman and CEO of WarnerMedia's parent, AT&T indicated in mid-May 2019 that it would use the HBO brand and would tie into cable operators as HBO cable subscribers would have access to the streaming service. A beta was expected in the fourth quarter of 2019 and a full launch in the first quarter of 2020 at the time.Max principally serves as a content hub for WarnerMedia's various film and television properties, offering a range of original programming and library content from the company as well as additional content licensed through third-party distributors. According to AT&T, HBO and HBO Max had a combined total of 69.4 million paying subscribers globally on June 30, 2021,

3.6.8 ALTBalaji



ALTBalaji is an Indian subscription-based video-on-demand (SVOD) service which is a wholly owned subsidiary of Balaji Telefilms Ltd.launched on 16 April 2017 .ALTBalaji, a subsidiary of Balaji Telefilms Limited, is a group entry into digital entertainment. Balaji Telefilms conquered television and became known in the movies. Balaji Telefilms wants to reach individual viewers directly by offering original, bespoke programming that is always accessible. It is available on multiple interfaces, from desktops, laptops, tablets and smartphones to connected TVs, ALT Balaji combines cutting-edge technology with immersive storytelling.ALTBalaji offers a fresh, original and exclusive story. The platform is specially tuned for Indians around the world, offering premium, high-quality shows featuring renowned celebrities, acclaimed writers and award-winning directors, and mainstreaming

ALTBalaji. Make it a true alternative to entertainment. ALTBalaji will host shows in various languages, catering to our regional language speakers, both in India and abroad.

3.7 Challenges Faced by OTT Platforms

Even before discussing other issues, it is important to understand that the biggest issue is distribution. For example, to deliver content through these platforms, users need to connect their TV to the Internet. This means that traditional TVs need to be replaced with new internet-enabled TVs, which are usually smart TVs. Below are some of the other notable challenges facing the OTT platform

1. Bottle Neck

As the number of OTT viewers increases, Internet restrictions are beginning to create bottlenecks. The industry has responded by bringing content that has become known as the "edge" closer to its users. A private content delivery network (CDN) was used for this. Another related challenge was the bandwidth bottleneck. This was resolved using dynamic adaptive streaming over DASH / HTTP using concepts such as:

- Apple HLS
- Dynamic Adobe streaming
- Microsoft Smooth Streaming

These solutions depend on the server rack to create content versions at different bit rates, resolutions, and frame rates. Such content can be dynamically swapped out based on the bandwidth available to the end-user device. At the same time, audio / video compression has been improved to allow lower bitrates, MPEGH, HEVC, and other parameters.

2. Content Challenge

Content is at the heart of the OTT platform, but it doesn't seem to be the most important factor in attracting viewers. Also, if these services cannot create and deliver the content that viewers want, they will not be successful in the long run.

Providing niche content is a great way to overcome this challenge. WWE and Crunchyroll are good examples of content providers for creating niche content.

3. Content Discovery

Viewers have lost the patience to search hundreds of channels to find what they like. Today's consumers want to find the content they need after scrolling through just a few pages. For this reason, it is important to improve content detection capabilities on OTT platforms. These platforms need to use applications that can recognize viewer preferences and habits. Such applications need to be able to personalize the viewer's experience.

4. Meeting Demand

In most cases, it's difficult to determine which content is likely to be disseminated by word of mouth. When video content becomes viral, the OTT platform can become unready. It's always possible for a piece of content to get millions of views in a short period of time, sometimes in a day or two. Services need to be adequately supplied to meet such demands. This refers to the server and supported bandwidth, all of which are in place to avoid crashes. The failure to stream the 2014 Academy Awards event live is one of the best examples of such a failure.

5. Managing expectations

This is an internal problem, but no less of an issue because of that. Because some companies have made successful investments in OTT operations, it doesn't necessarily follow that all will. Nor indeed, that a company will be as successful and show returns as quickly as its investors want. Netflix's share price is still incredibly exposed to shifts in subscriber numbers growth, with any underperforming quarter seeing it punished in the market.

6. Viewer Retention

Maintaining an audience base is a major challenge for OTT platforms. The various concerns in this regard are

- Provide the content that the viewer wants
 - Deliver high quality video content
 - Advertising content should be unobtrusive and allow viewers to skip

Annoying advertising content and poor video quality have proven to be the number one reasons viewers move away from certain content. Therefore, it's important to address these issues to increase viewer retention. The OTT space continues to be crowded. OTT services need to focus more on creating and delivering content and follow policies that not only attract new viewers, but also retain existing viewers.

3.8 IMPORTANCE OF OTT PLATFORM

1. Multi- screen application

The first and the foremost importance of auditor platform is viewing experience. In addition to the entertainment viewers have the freedom to watch on almost any device with an internet connection.

2. Innovations in media streaming technology

OTT video was born out of convenience in watching programmes at any given time. People did not want to be tied down to specific times to view content. Instead, they wanted to view content at any time, any place, and on any device. This is the main reason for the rise of OTT platforms. Technology has played a pivotal role in the propagation of OTT video services.

3. Creative and Unusual Content

Through these over the top platforms, various creative ideas have come to the forefront which could not be brought across due to censorship or regulatory laws.

4. Easy Access

One can log in to these OTT platforms through mobile applications, smart TV, laptops, tablets, etc. The only requirement is an internet connection.

5. For International content

Any Indian content uploaded on these platforms can be viewed internationally. This gives a broader outreach of content and talent.

6. pricing model

Amazon Video is one of the most affordable OTT platforms in India. The service is priced at Rs 999 per year and at Rs 129 per month. Under these plans, the company offers customers access to 4K content, unlimited downloads and access to a huge library of content. Innovative pricing techniques adopted by several OTT players have helped attract and retain customers.

3.9 ADVANTAGES OF OTT PLATFORMS

1. Connectivity

OTT platforms are really easy to access and use. It just requires a stable internet connection and a compatible viewing device like a smart TV or a smartphone etc. The network carrier provides the internet connectivity against a monthly payment and the viewer has the flexibility to choose an internet package or plan based on his requirements.

2. Cost Friendly

OTT platforms are very cost-friendly when compared to the Traditional TV connection. You get to access all the content you get on TV cable on OTT platforms for a relatively low price. However, the only cost involved is the internet data package which depends on your OTT usage and the subscription fees, if any.

3. Convenience

With OTT platforms, you get to access your favourite content anytime, anywhere and as often as you want. With the availability of the internet these days, accessing content on OTT platforms becomes easy on all devices. This freedom of location makes it very convenient for viewers to stream their favourite content. They just need to log in to their streaming account from anywhere and start streaming.

4. Variety content

With traditional cable networks, viewers face limitations in channel selection, type, quality and variety of content. They are restrictive in the content that they show. For eg. serials, news, live games, movies, kids content etc... Whereas, OTT platforms open up a wide variety of content including both free & paid content. Users can subscribe to become prime members, but even without subscribing, they can access varied almost unlimited content.

5. An open platform for Entertainment Industry

The biggest advantage of this platform is that it has provided a medium for new talent to get more opportunities as the number of projects are much higher in comparison to television or films.

6. Device Independent

OTT platforms allow you to access media services anytime and anywhere. And this stands as the biggest advantage of OTT platforms. Thanks to the VOD services, you get to enjoy your favourite shows anytime, anywhere. Also, it is now compatible with digital devices like Smart Android TV and other devices so, you can enjoy streaming on that too. You can access it on any device irrespective of the network carrier.

7. Crisp Sound and Picture Quality

Every OTT Platform keeps the content quality in High Definition. The higher your speed, the better will be auditory and visual content since the service is offered online. The video and audio quality of the movies are usually high, which is a great advantage of using an OTT platform like HBO and Netflix. On the plus side, you can customize the video and audio quality per your liking

3.10 OTT platform v/s Movie Theatre

OTT platforms are becoming more and more popular as people's lifestyles change and the use of smartphones with affordable internet services increases. An important

reason that attracts the viewers and helps the OTT Platforms to grow in India is original content. The number of Streaming Apps in India has increased from a single digit to double-digit in the past few years

Cinemas have changed a lot over the years. Over time, multi-screen cinema has increased and single-screen has decreased. Many single screen cinemas are closed due to high operating costs. PVRs and INOXs have long been two major competitors in the entertainment industry. Both dominate the industry and have a large market share. The reason is to always provide new and exciting things to our viewers. PVR was the first company to open 4D screens in India in 2016, and INOX has revolutionized the industry with the introduction of automated kiosks.

Both cinemas and OTT platforms have their own sales proposals in the Indian streaming business. On the one hand, cinemas offer the opportunity to watch movies in 3D with high notes and image quality. On the other hand, the OTT platform has no language barrier. Streaming apps provide content in different languages, as well as subtitles in different languages, including regional languages. The OTT platform also allows you to watch personalized content and make recommendations based on what you want to watch. Cinemas charge a fee depending on the movie, and the time and seats are displayed. The OTT platform is billed monthly and annually according to plans that offer a variety of content and features. One of the benefits of streaming apps is that they can serve a variety of content to non-premium subscribers. Therefore, the OTT platform is cheaper. Watching a movie at home is convenient, but it also increases breaks and breaks. On the other hand, in a movie theater, you can enjoy movies without being disturbed

3.11 ORIGIN OF OTT PLATFORMS IN INDIA

The first dependent Indian OTT platform was BIGFLIX, launched by Reliance Entertainment in 2008. In 2010 DIGIVIVE launched India's first OTT mobile app called NEXGTV, which provides access to both live TV and on-demand content. NEXGTV is the first app to live-stream Indian Premier League matches on smart phones during 2013 and 2014. The livestream of the IPL since 2015, when rights were won played an important role in the growth of another OTT platform, Hotstar (now Disney+ Hotstar) in India. OTT gained significant momentum in India when both DittoTV (Zee) and Sony Liv were launched in the Indian market around 2013.

DittoTV was an aggregator platform containing shows across all media channels including Star, Sony, Viacom, Zee, etc. Since the outbreak of COVID-19 and consequent national lockdown in March 2020, India witnessed a significant growth in the usage of OTT. Reports suggest, "the OTT market in minutes of consumption in India has risen from 181 billion to 204 billion minutes in 2021." These statistics indicate OTT will be the "new normal" for television. There are currently about 40 providers of over-the-top media services (OTT) in India, which distribute streaming media over the Internet. Covid scenario played a significant role in the growth of OTT platforms in India.

3.11.1 Offers provide by OTT Platforms in India

Although one of the most popular streaming services in India, Netflix has been the most expensive as well. But with the new prices, Netflix is now closer in competition with rivals in India. When , we compare Netflix subscription plans with Disney+ Hotstar which is another major player in the country. Disney+ Hotstar also revamped its offerings in September this year making its content library available on all plans similar to Netflix. Netflix earlier this week slashed prices of its subscription plans for the first time in India. Netflix subscription plans are now cheaper by at least ₹150. The price cut applies to all Netflix offerings including the mobile and premium plans.

Netflix offers a total of four subscription plans starting with mobile as its cheapest and premium as the most expensive. The Netflix mobile plan is priced at ₹149 per month and you get SD (480p) content and the entire library content available in India. You can watch on a smartphone or tablet but only one device at a time. Then there's the Netflix Basic plan priced at ₹199 per month and under which you get to watch SD content. This plan supports all devices including phone, tablet, computer and TV. The mid-tier Netflix „Standard“ plan is priced at ₹499 per month with Full HD content, and support for all four devices. The most expensive Netflix plan is the premium plan where you get 4K + HDR content, and it's priced at ₹649 per month. Disney+ Hotstar has three subscription plans including a free one which is ad-based. Starting with the Disney+ Hotstar mobile plan, you can get this for ₹499 per year and under this plan you get access to all content in HD, and you can watch on one smartphone.

3.12 Government Policy which supports OTT Platforms

The latest Media and Entertainment Outlook 2020 report by PwC states India is currently the world's fastest growing OTT market, and is positioned to become the world's sixth largest by 2024. This means India is likely to overtake South Korea, Germany, and Australia in OTT revenue. Sizable investments by Netflix, Amazon, Disney+ Hotstar and other players in both originals and licensed content is expected to make up 93% of total OTT revenue.

India has resisted regulation of the OTT space and no laws or rules exist regulating OTT platforms. It is a relatively new medium of entertainment, classified as digital media. Unlike traditional media such as television, films, print or radio, which follow government guidelines under the direction of various regulatory bodies, OTT enjoys a free run. However, there have been frequent calls for censorship of online content by various political groups and social organizations. Shows like Netflix's "Leila" and "Sacred Games" have invited the ire of certain groups leading to court cases asking for bans or regulation of streaming content. As a preemptive measure, in January 2019, nine streaming services in India announced a self regulation code under the aegis of the Internet and Mobile Association of India (IAMAI). The code settled on some "best practices" to avoid governmentled censorship. However, the government indicated that this might not be enough and started holding consultations on the subject.

In a farreaching move, a gazette notification issued Nov. 11 and signed by the president of India, online films, digital news, and current affairs content were brought under the purview of the Government's I&B Ministry. With the government's decision to regulate online content providers, the challenge for the OTT platforms would be keeping a check on their content. It is also likely that they would have to apply for certification and approval of the content before streaming. This can lead to a lot of competition, as most OTT platforms present content that is censored by an Indian certificate authority.

No specific guidelines have been published yet, but it is known that the TV content programming code embodied in the Cable Television Network Regulation Act of 1995 can serve as a template for framework regulation of online content. Therefore, while the industry is waiting for further regulatory guidance from the Ministry of I &

B, the OTT platform may resist plans to censor content streamed in India because of infringement of creative freedom.

The rules require OTT platforms to self-classify content into five major age-based categories, provide parental locks for mature content, and a “reliable age verification mechanism” for adult-only content. They were also required to set up a selfregulatory mechanism The government said OTT platforms like Netflix and Amazon Prime Video) would have to self-classify the content into five age-based categories - U, U/A 7+, U/A 13+, U/A 16+, and A .

3.13 OTT platform during Covid Scenerio

Unlike most industries, the Covid 19 pandemic is a breakthrough for the media and entertainment industry. If the last decade has been a multiplex boom, 2020 was the year of OTT entertainment, with cinemas and cinemas closed for most of the year. People around the world were trapped in their homes and turned to digital screens for entertainment. The crippling effect of COVID-19 pandemic is being reflected in the form of behavioural and lifestyle changes in people, including a change in their media consumption. The theater was closed and the television station played a rerun of the old show. It forced consumers to look for alternative entertainment options, and they started trying out existing OTT platforms. These platforms had a huge library of movies (multiple languages) and original programming that were promised to entertain consumers. Affordable subscription fees, easier access to the internet, and longer hours at home have all benefited OTT.. According to a recent report by PwC, India is the world’s fastest growing market for streaming platforms and is also known as an over-the-top or OTT service provider. OTT video streaming platforms such as Netflix, Amazon Prime Video, Disney + Hotstar, Voot and SonyLIV are hugely popular in India

The outbreak of the COVID 19 pandemic had a positive impact on the OTT situation as viewers consumed more content at home via OTT devices. According to Zuora’s Subscription Economy Index Report, the trend of COVID19’s impact on subscriber acquisition rates since March 131, 2020, is the global trend of OTT video streaming companies in March 2020 compared to the last 12 months. It suggests that the subscription growth rate has increased by about 1 time. 7 times the growth rate over the last 12 months.

The OTT platform has been accepted by domestic viewers, and since the outbreak of the Covid 19 pandemic last year, more and more filmmakers have chosen to stream their films on this media.

Taking advantage of this situation, several new Over The Top (OTT) platform companies have emerged and expanded their presence throughout India. Previously, the OTT platform was limited to cities. But now it's available everywhere, and even in villages. And the results will be visible to everyone.

CHAPTER 4
DATA ANALYSIS AND INTERPRETATION

Analysis and interpretation of data is important to understand the problem faced and to arrive at an informed conclusion. Data analysis transforms the data collected into knowledge and information about the research. It involves analysis of the given problem, measurement of the progress and drawing conclusions from the available data. Data interpretation draws a conclusion from the data collected from multiple sources which can be useful for reference in the future. Data interpretation helps the researcher to interpret the future trend regarding the chosen topic. This chapter includes the responses obtained from the sample respondents through a questionnaire in the form of in the form of graphs, diagrams, tables and percentage.

Table 4.1 Gender of Respondents

Gender	No of Respondents	Percentage
Male	59	27.4%
Female	156	72.6%
Others	0	0
Total	215	100%

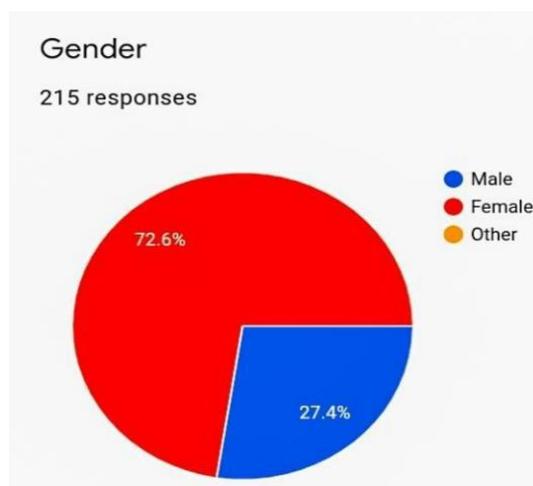


Figure 4.1 Gender of Respondents

Inference: According to the Table 4.1 and fig.4.1 , majority of the respondents are female(72.6%), and Male (27.4%) .

Thus ,it is found that there is more number of female than males

Table 4.2 Age of Respondents

Age	No of Respondents	Percentage
Below 18	16	7.4%
19-25	159	74%
26-35	21	9.8%
36-50	13	6%
Above 51	6	2.8%
Total	215	100

Age

215 responses

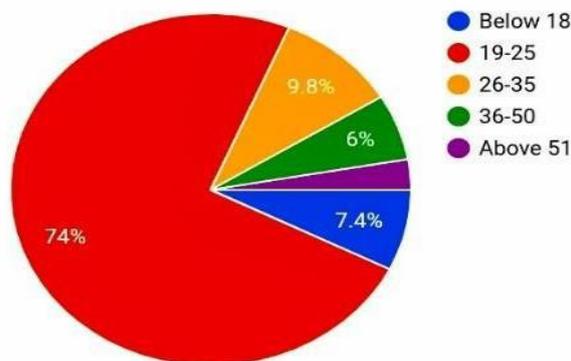


Figure 4.2 Age of Respondents

Inference: It is observed from the above table and graphical representation that Majority of the respondents (74%) belong to the age group between 19-25, 7.4% belongs to below 18 category, 9.8% to the age group 26-35, 6% of the respondent

belong to the age group 36-50, 2.8% belong to the age group 41-50 and 3.1% belong to the age group 51-60, 0.8% of respondent belongs to the age group above 60 years

Thus it is found that 19-25 age category is more than other category of respondents.

Table 4.3 Employee status of Respondents

Employment Status	No of Respondents	Percentage
Student	153	71.2%
Working	42	19.5%
Unemployed	8	3.7%
Self employed	9	4.2%
Others	3	1.4%
Total	215	100%

Occupation

215 responses

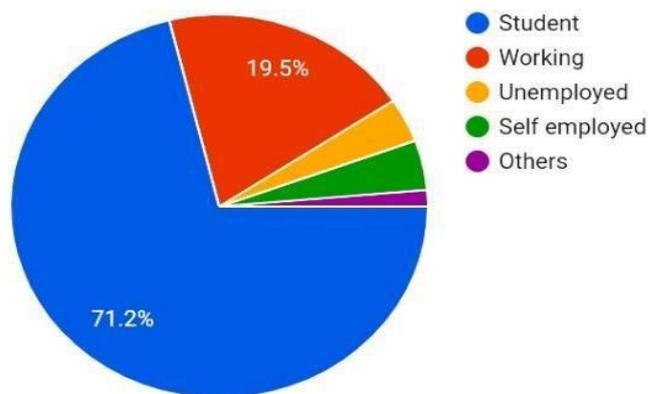


Figure 4.3 Employment status of Respondents

Inference: From the above table and graphical representation, it is found that 71.2% Of respondent are students, 19.5% are working, 4.2% are self-employed, 3.7% are unemployed and other"s are 1.4% .

Thus ,it is found that there is more number of students than others category of people

Table 4.4 popularity of ott platform

OTT platform	No of Respondents	Percentage
Netflix	176	81.9%
Hotstar	172	80%
Voot	56	26%
Amazon prime	177	82.3%
Zee5	79	36.7%
Alt Balaji	11	5.1%
MX Player	116	54%
Others	43	20%
Total	215	100%

Which OTT platform do you heard about?

215 responses

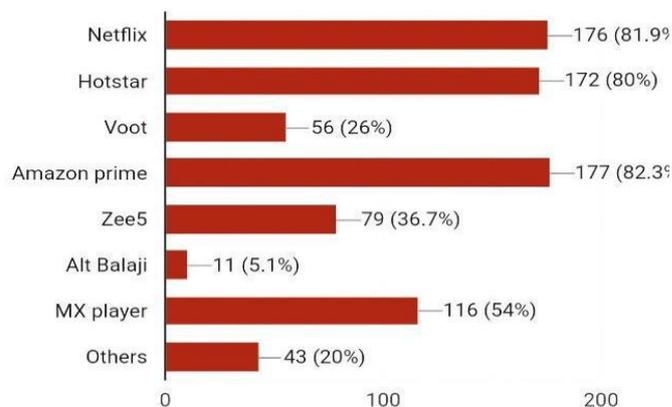


Figure 4.4 Popularity of ott platform

Inference: From the above table and graph representation Amazon Prime (82.3%) is the most popular OTT being used followed by Netflix (81.9%), Hotstar (80%), MX player (54%) , Zee5 (36.7%) , voot (26%) ,others (20%).

Thus it is found that more respondents prefer amazon prime than other OTT platforms

Table 4.5 Hours spend on OTT platform

Hours spend	No of Respondents	Percentage
0-2	124	57.7%
2-4	61	28.4%
More than 4	30	14%
Total	215	100%

How many hours do you spend to watch OTT videos daily?

215 responses

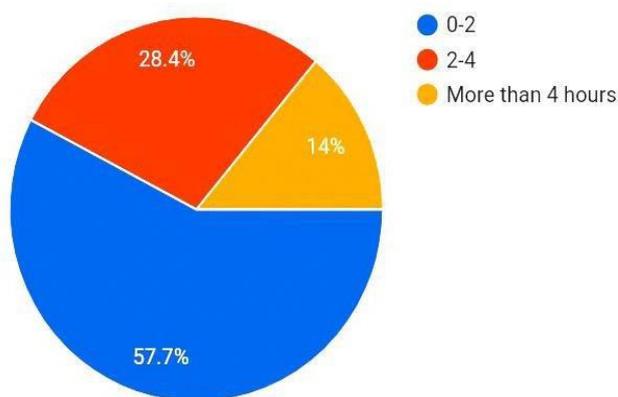


Figure 4.5 Hours spend on OTT platform

Inference: From the above table and graphical presentation, more than half (57.7%) of the respondents have been watching OTT videos for 0-2 hours per day and

28.4% respondents have been watching for 2-4 hours and 14% of respondents have been watching for more than 4 hours.

Thus it is found that more number of respondents use OTT platforms for 0-2 hours per day.

Table 4.6 Started using OTT platform

Started using OTT platform	No of Respondents	Percentage
During covid scenario	139	60.5%
Before covid scenario	65	30.2%
Non of the above	20	9.3%
Total	215	100%

When you start using OTT platform services

215 responses

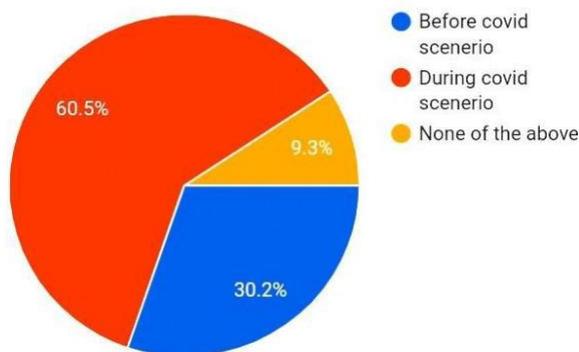


Figure 4.6 Started using OTT platform

Inference: From the above table and graphical presentation, it is found that 60.5% of the consumers started using new OTT platforms during the Covid Scenerio, and 30.2% started using OTT platform before Covid scenerio. This indicates that the lockdown was one of the reason for the rise of OTT platform. The above question aims to understand the timelines for the popularity of OTT. Thus it is found that more number of respondents started using OTT platforms during covid scenerio(60.5%)

Table 4.7 OTT Platform During Covid Scenerio

Use of OTT platform increase/Decrease in lockdown period	No of Respondents	Percentage
Highly increased	132	61.4
Increased	58	27%
Rarely increased	19	8.8%
Not Increased	6	2.8%
Total	215	100

Do you think the habit of watching OTT video content has increased during lockdown period?

215 responses

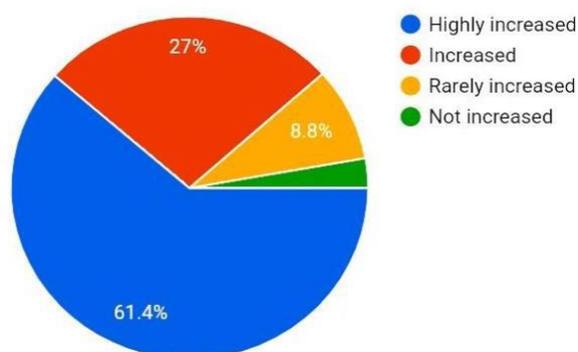


Figure 4.7 OTT platform during covid scenerio

Inference: From the above table and graphical presentation, it is found that 61.4% respondents highly increase their habit of watching OTT video content during lockdown period and 27% increase their OTT consumption and 8.8% rarely increase their OTT consumption.

Thus it is found that 61.4% respondents highly increase their habit of watching OTT video content during lockdown period.

Table 4.8 Most significant reason that the Production Houses are investing in OTT platform

Reason for investment of production House	No of Respondents	Percentage
Pandemic	130	60.5%
Small Scale production sees more profit in OTT platform	76	35.3%
They don't see any future in theatre	15	7%
Guarantee packages from OTT platform	37	17.2%
Others	26	12.1%
Total	215	100%

What is the most significant reason that the Production Houses are investing in OTT platform and moving away from traditional releases?

215 responses

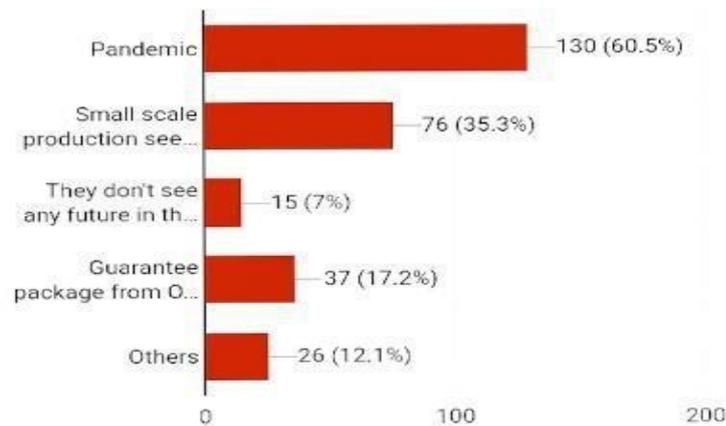


Figure 4.8 Most significant reason that the Production Houses are investing in OTT platform

Inference: From the above table and graphical presentation, the major reason for the production houses to invest in OTT platforms is the prevailing pandemic situation(60.5%) ,followed by small scale production see more profit in OTT platforms (35.3%) , more over OTT platforms provides guarantee packages from OTT platforms which is cost friendly for a long period.

Thus it is found that major reason for the production houses to invest in OTT platforms is the prevailing pandemic situation.

Table 4.9 Paid OTT platform

Use of any paid OTT platform	No of Respondents	Percentage
Yes	107	49.8%
No	108	50.2%
Total	215	100%

Are you using any paid OTT platform currently?

215 responses

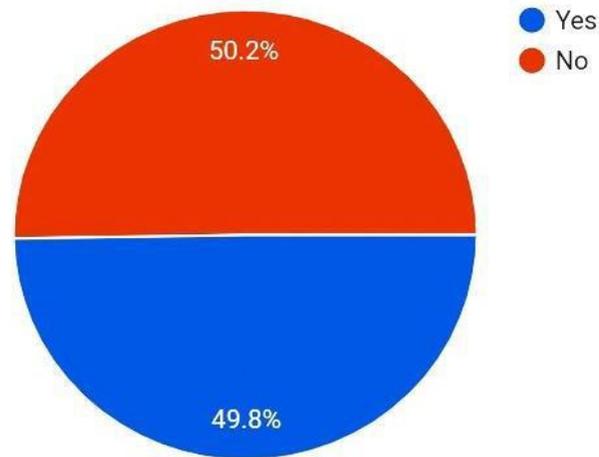


Figure 4.9 Paid OTT platform

Inference: From the above table and graphical presentation, it is found that 50.2% respondents use paid OTT platforms and 49.8% didn't use any type of paid OTT platforms.

Thus it is found that 50.2% respondents prefer paid OTT platform.

Table 4.10 Awareness about OTT platform

Awareness	No of Respondents	Percentage
Friends Recommendations	136/215	63.3%
Discounts/Referrals	14/215	6.5%
Advertisement	95/215	44.2%
Internet	112/215	52.1%

Via Facebook instagram etc	49/215	22.8%
Total	215	100%

How did you know about current OTT service platform?

215 responses

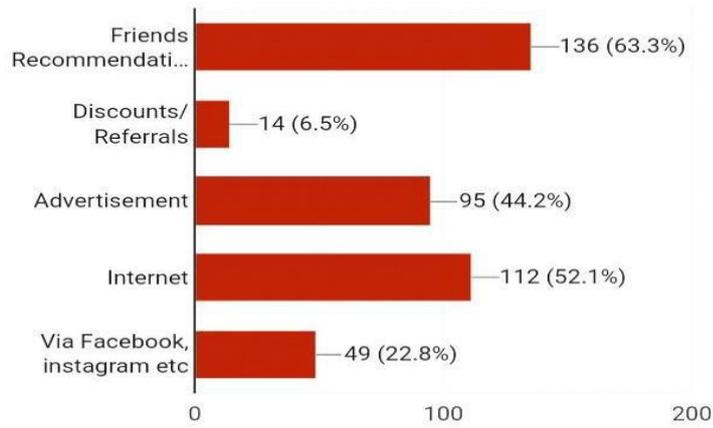


Figure 4.10 Awareness about OTT platform

Inference: From the above table and graphical presentation, it is found that 63.3% knows about current OTT service platforms through friends recommendations and 52.1% knows through internet. However 44.2% knows through advertisement and 22.8% knows through Facebook, Instagram etc. Only 6.5% knows OTT services through discounts.

Thus it is found that majority of the respondents (63.3%) knows about current OTT services platforms through from friends recommendations.

Table 4.11 Most entertaining platform during Covid scenario

Most Entertainment platform	No of Respondents	Percentage
Television	41/215	19.1%

OTT(Netflix, Amazon prime, Hotstar etc)	150/215	69.8%
YouTube	137/215	63.7%
Others	16/215	7.4%
Total	215	100%

The most entertainment platform used in pandemic period?

215 responses

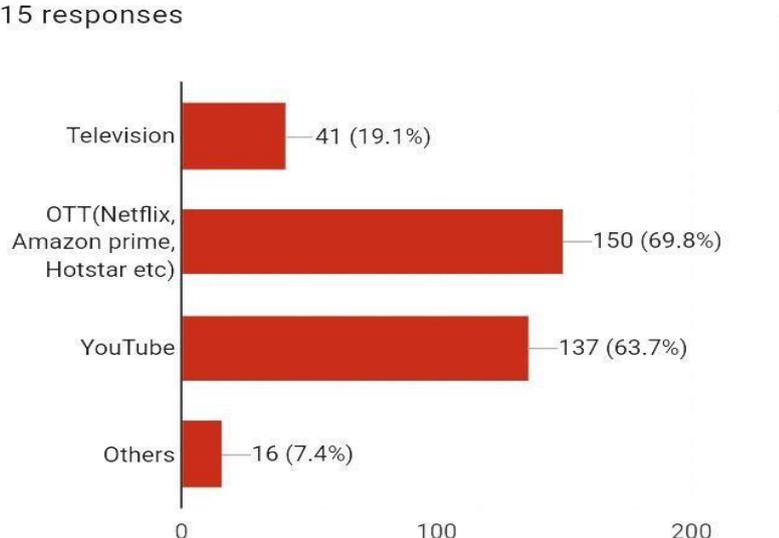


Figure 4.11 Most entertaining platform during covid scenerio

Inference: From the above table and graphical presentation, it is found that OTT platforms like Netflix, Amazon Prime, Hot start etc. (69.8%) is most entertainment platforms during the pandemic, followed by you tube (63.7%), Television (19.1%).

Thus it is found that majority of the respondents prefer OTT platform than other platforms during covid scenerio.

Table 4.12 Preferred media for entertainment

Preffered Meda	No of Respondents	Percentage
Paid subscription with no add	67	31.2%
Free subscription with adds	148	68.8%
Total	215	100%

What do you prefer as a consumer in OTT

215 responses

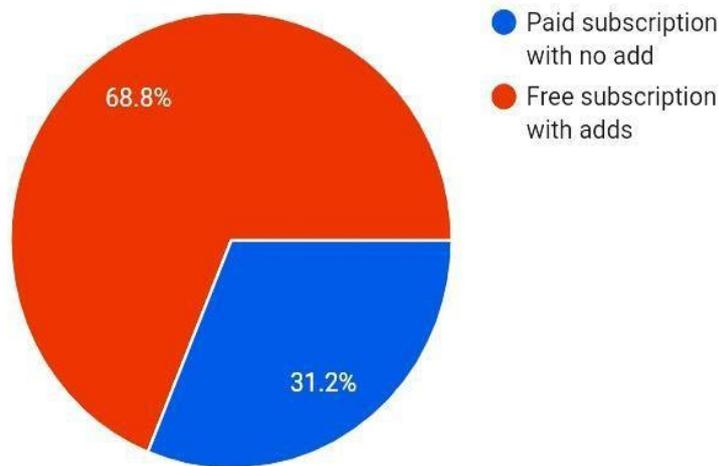


Figure 4.12 Preferred media for entertainment

Inference: From the above table and graphical presentation, it is found that 68.8% respondents prefer free subscription with adds in OTT and 31.2% prefers paid subscription with no adds.

Thus it is found that majority of the respondents (68.8%) prefer free subscription with add in OTT platforms.

Table 4.13 Waited for a movie release on OTT platform

Movie release on OTT	No of Respondents	Percentage
Always	44	20.5%
Many Times	78	36.3%
Never	45	20.9%
Depends on time and money	48	22.3%
Total	215	100%

Have you ever preferred waiting for a movie release on OTT ?

215 responses

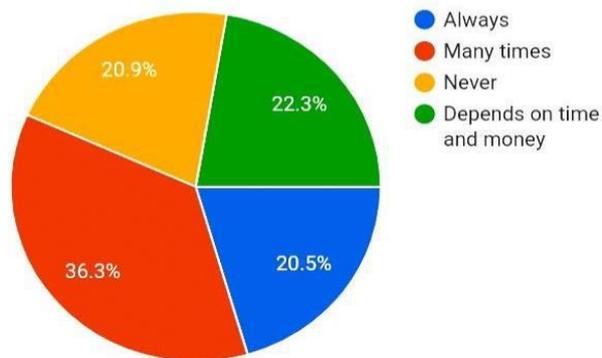


Figure 4.13 Waited for a movie release on OTT platforms

Inference: From the above table and graphical presentation, it is found that 20.5% always waiting for movie on OTT release and 36.3% respondents many times wait for OTT release. However 20.9% never wait for OTT release and 22.3% wait for OTT release depends on their time and money.

Thus it is found that majority of the respondents (36.3%), many times waited for OTT release.

Table 4.14 preference of OTT over traditional theatre releases

Preference	26	12.1%
2	28	13%
3	81	37.7%
4	39	18.1%
5	41	19.1%
Total	215	100%

How much do you prefer OTT content over traditional theatre releases (TV v/s movie theatre)

215 responses

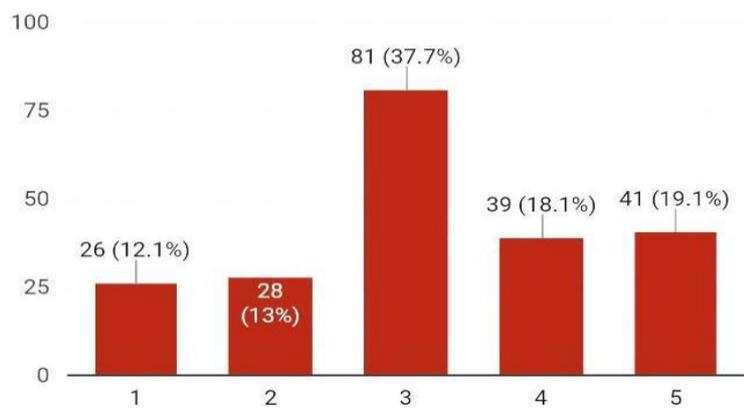


Figure 4.14 Preference of OTT over traditional theatre releases

Inference: From the above table and graphical presentation, it is found that 37.7% prefer moderate degree of OTT content over traditional theatre.

Table 4.15 Cheap or Expensive

Cheap or Expensive	No of Respondents	Percentage
Very Cheap	13	6%
Cheap	42	19.5%
Not very cheap/Not very expensive	126	58.6%
Expensive	29	13.5%
Very Expensive	5	2.3%
Total	215	100%

Do you find OTT services to be cheap or expensive?

215 responses

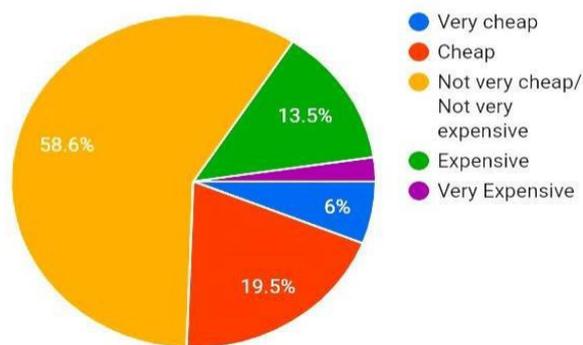


Figure 4.15 Cheap or expensive

Inference: From the above table and graphical presentation, it is found that 58.6% respondents found OTT services as not very cheap or not very expensive. 19.5% found OTT services as cheap and 13.5% found it as expensive. However 6% respondents consider OTT services as very cheap.

Thus it is found that majority of the respondents (58.6%) found that OTT services are not very cheap /not very expensive .

Table 4.16 Reason for not using OTT platform

Reason for not using OTT platform	No of Responses	Percentage
Not aware about the service	41	19.1%
Low Safety	14	6.5%
Difficult to understand	12	5.6%
High cost	74	34.4%
Network Error	114	53%
Low Access	32	32%

Reasons for not using OTT services

215 responses

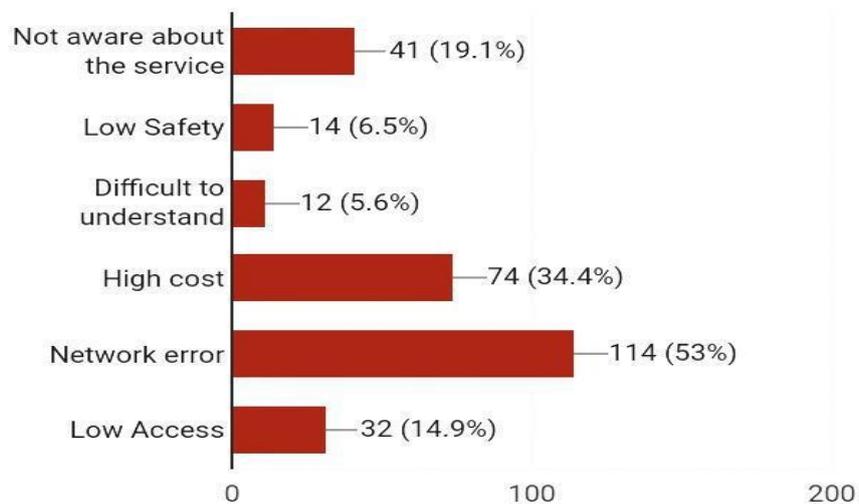


Figure 4.16 Reason for not using OTT platform

Inference: From the above table and graphical presentation, it is found that 53% of respondents is not using OTT services because of network error and 34.4% is because of high cost. However 19.1% is not aware about the OTT services and 14.9% have only low access.

Thus its found that majority of the respondents (53%) is not using OTT services due to network error.

Table 4.17 Consumer Preference

Consumer Preferences	No of Respondents	Percentage
Online Streaming platform	157	73%
DTH Cable Operators	32	14.9%
None of the above	26	12.1%
Total	215	100%

From the following which one you prefer

215 responses

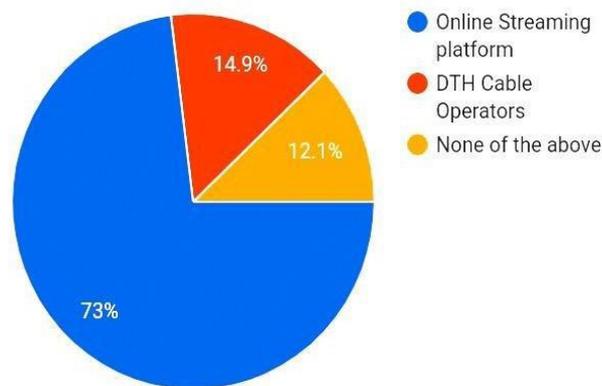


Figure 4.17 Consumer Preference

Inference: From the above table and graphical presentation, it is found that 73% prefers online streaming platforms and only 14.9% prefers DTH Cable operators.

Thus it is found that 73% of respondents prefer online streaming platform than DTH cable operator's

Table 4.18 Cinema hall footfalls due to OTT platform

Cinema footfalls in future	No of Respondents	Percentage
Yes	57	26.5%
No	54	25.1%
Maybe	104	48.4%
Total	215	100%

Will there be a decrease in cinema hall footfalls due to OTT platform infuture?

215 responses

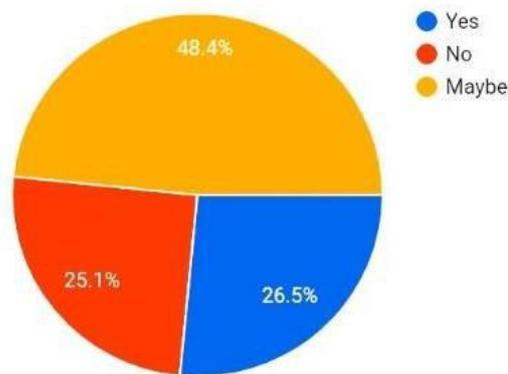


Figure 4.18 Cinema hall footfalls due to OTT platform

Inference: From the above table and graphical presentation, it is found that 48.4% believe that there may be a decrease in cinema Hall footfalls due to OTT platforms in future. However 25.1% believe that OTT will not affect cinema Hall footfalls and 26.5% believes OTT will affect cinema footfalls in future. Thus it is found that majority of the respondents (48.4%) believes that there may be decrease in cinema hall footfalls due to OTT platforms in future.

Table 4. 19 Demand for OTT after corona

Demand after corona	No of Respondents	Percentage
Yes	64	29.8%
No	101	47%
Maybe	50	23.3%
Total	215	100%

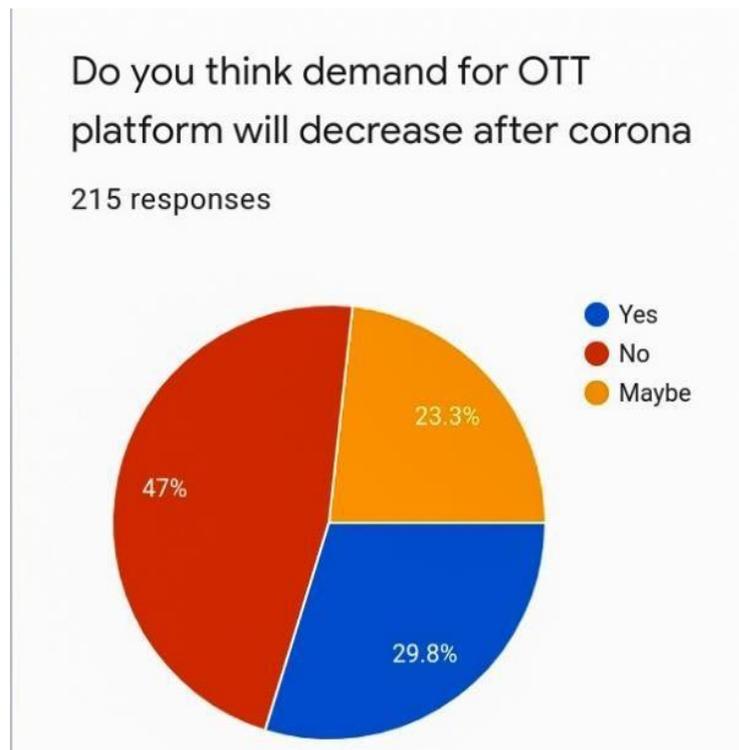


Figure 4.19 Demand for OTT after corona

Inference: From the above table and graphical presentation, it is found that 47% believes there will not be a decrease in the demand of OTT platforms after corona. However 29.8% believes in the decline of the demand of OTT platforms and 23.3% believes that there may be a decline in the demand of OTT platforms.

Thus it is found that majority of the respondents (47%) believes that there won't be a decrease in the demand of OTT platform even after corona

Table 4.20 Recommend OTT platform

Recommendations	No of Respondents	Percentage
Strongly Recommend	79	36.7%
Rarely Recommend	58	27%
Recommend	69	32.1%
Never Recommend	9	4.2%
Total	215	100%

Will you recommend the facilities of OTT platform to your friends and family

215 responses

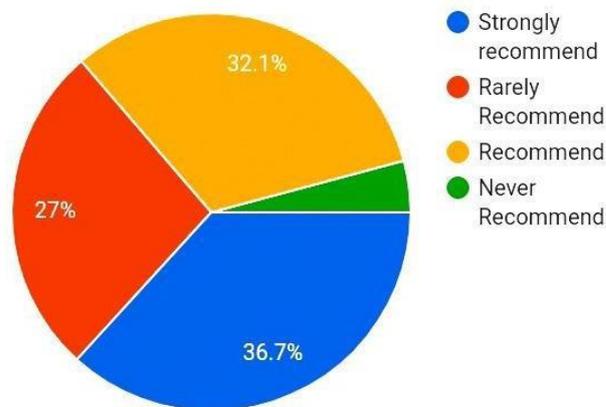


Figure 4.20 Recommend OTT platform

Inference::From the above table and graphical presentation,it is found that 36.7% respondents strongly recommend OTT platforms to friends and family. 27% will rarely recommend to their friends and family.

Thus it is found that majority of the respondents (36.7%) strongly recommend OTT platforms to friends and family.

Table 4.21 OTT services and user friendliness.

User friendly	No of Respondents	Percentage
Strongly Agree	61	28.4%
Agree	84	39.1%
Neutral	64	29.8%
Disagree	6	2.8%
Strongly Disagree	0	0%
Total	215	100%

Do you think that OTT services are user friendly?

215 responses

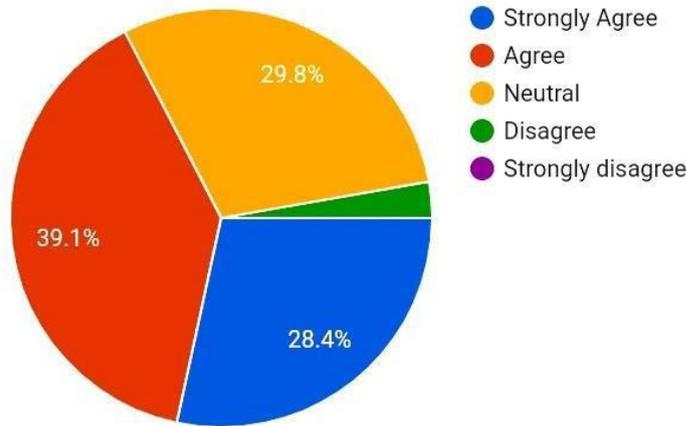


Figure 4.21 OTT services and its user friendliness.

Inference : From the above table and graphical presentation, it is found that 39.1% agrees that OTT services are user friendly. However 29.8% Neutrally agree that OTT services are user friendly and 28.4% strongly believes that OTT services are user friendly.

Thus it is found that majority of the respondents (39.1%) agrees that OTT services are user friendly.

Table 4.22 Change in OTT usage

Change in OTT usage	No of Respondents	Percentage
Highly Increased	69	32.1%
Increased	94	43.7%
Neutral	47	21.9%
Decreased	5	2.3%

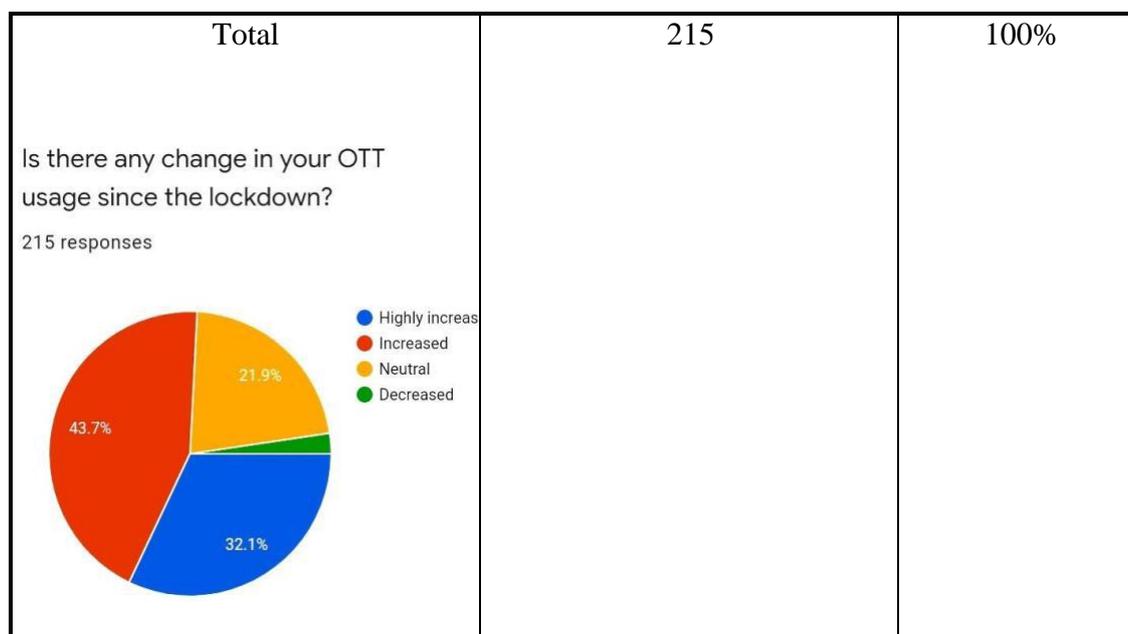


Figure 4.22 Change in OTT usage

Inference: From the above table and graphical presentation, it is found that 43.7% increased their OTT usage during the lockdown period. However 32.1% highly increased their OTT usage during lockdown period.

Thus it is found that majority of the respondents (43.7%) has increased their OTT usage during the lockdown period.

Table 4.23 Satisfaction level

Satisfaction Level	No of Respondents	Percentage
Highly Satisfied	53	24.7%
Satisfied	111	51.6%
Neutral	48	22.3%
Dissatisfied	0	0%
Highly Dissatisfied	3	1.4%
Total	215	100%

How would you rate the satisfaction level regarding OTT services?

215 responses

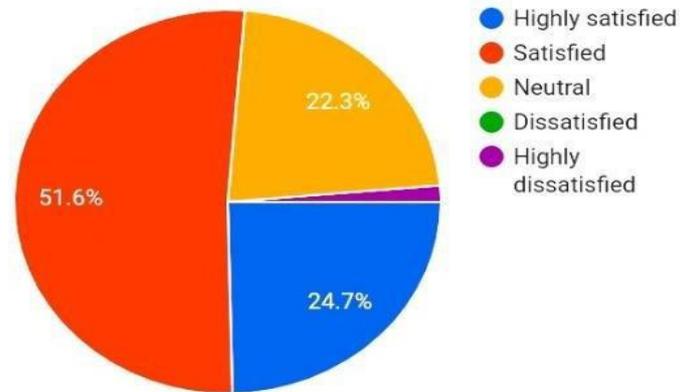


Figure 4.23 Satisfaction level

Inference: From the above table and graphical presentation, it is found that 51.6% respondents are satisfied in OTT services. However, 24.7% are highly satisfied of OTT services and 22.3% are neutrally satisfied of OTT services.

Thus, it is found that the majority of the respondents (51.6%) are satisfied in OTT services.

Table 4.24 Overall service of OTT platform

Overall Service	No of Respondents	Percentage
Excellent	67	31.2%
Good	115	53.5%
Neutral	29	13.5%
Poor	0	0%
Very Poor	4	1.8%
Total	215	100%

Opinion about overall service provided by OTT platform

215 responses

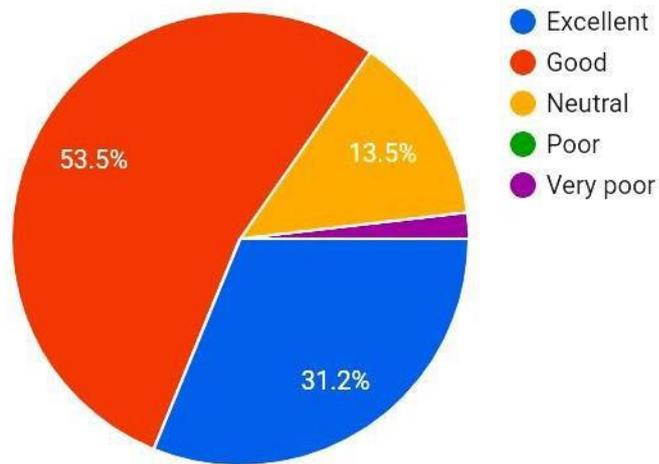


Figure 4.24 Overall service of OTT platform

Inference: From the above table and graphical presentation, it is found that 53.5% respondents are of the opinion that the overall services provided by OTT platforms are good and 31.2% consider OTT platforms services as an excellent experience. However, 13.5% are neutrally satisfied with the OTT services.

Thus, it is found that the majority of respondents (53.5%) shows an opinion that the overall services provided by OTT platforms are good.

CHAPTER 5
SUMMARY, FINDINGS, SUGGESTIONS AND
CONCLUSION

5.1.SUMMARY

Survey was conducted to analyse the influence of OTT platform during pandemic .The population selected was from Ernakulam district.

The current covid-19 pandemic leads to growth of OTT platform. There has been an exponential growth in video-on-demand platform in Ernakulam. Hotstar, Netflix and Amazon prime, have become big names in the business. There's no re-thinking in the way that the OTT business will be the substance of Media and Entertainment industries in coming years.

This chapter deals with the findings, recommendation and conclusion through data analysis.

5.2 FINDINGS

The over-the-pinnacle movies streaming offerings explosion in India has brought about the emergence of wonderful styles of content material intake during the last few years. For one, content material intake has grow to be rampant out of doors the house, in which till these days due to the Covid 19, the bulk of video intake took place internal and that too on a completely excessive scale.

1. Majority of the respondents belongs to the age group 19-25
2. We can find that female respondents are comparatively more than that of male respondents
3. Majority of the respondents are students
4. Majority of the respondents has started using OTT platforms after the arrival of the COVID-19 pandemic (60.5%)
5. Amazon Prime Video is the most popular OTT platform among youth followed by Netflix and then Disney + Hotstar.
6. The habit of watching OTT content has been increased during covid scenerio(61.4%)
7. According to the survey the major reason of production House to invest in OTT platform is pandemic(60.5)
8. Majority Respondents are not using any paid OTT platform(50.2%)

9. Majority of the youth are influenced by friends influence(63.3%) to use the OTT platforms Followed by the internet (social media 52.1%) becoming the next big factor.
10. User friendliness of the OTT systems is the maximum influential advantage derived from the OTT systems observed via way of means of the ability in utilization of those systems
11. The most entertaining Platform During Covid Scenerio is OTT platform(69.8%) followed by YouTube(63.7%)
12. Consumers usually prefer free subscription with adds(68.8%) more than paid subscription with adds(31.2%)
13. OTT platform is more cheaper than traditional platform
14. Major reason for not using OTT platform is network problem and cost of subscription
15. Majority of the youth are highly satisfied with their experience of using OTT Platforms & only a small group has dissatisfied with their OTT experience
16. 48.4% Respondents says that their maybe a fall in the demand of cinema footfalls due to OTT platform
17. 47% says that their won't be any decrease in OTT platform even after corona
18. 36.7% respondents strongly recommend OTT platform to their family
19. OTT platform are user friendly (39.1%)
20. Respondents are satisfied with the overall performance of OTT platform (51.6%)

5.3 SUGGESTIONS

1. The OTT platform must recommend to users new recommended content obtained by displaying attractive banners and gaining the right to stream protected content.
2. Introduce a better and more effective subscription plan to meet the needs of the majority of users who occasionally use the OTT platform.
- 3 User experience segmentation needs to be done from content selection to payment models, all of which need to be fine-tuned to the expectations of each audience.
4. Strengthen the consumer relationship with the streaming platform by collecting important user feedback. This allows you to maintain quality of service and maintain subscribers.

5. Advertising must be served by the OTT platform. Its presence should target the interests of the viewer with as little impact as possible on the viewing experience.

6. We need to make more attractive offers and promotions in relation to the recommended policies of the OTT platform. This will contribute to the acquisition of more new customers.

7. Consumers need to be aware of the negative effects of sharing credentials with others and take steps to resist them.

8 Promotion and promotion of OTT platform content should be increasingly done on social media. This is one of the factors that influences consumption by young people.

9. Need to broadcast more regional movies and shows. This will increase the number of OTT consumers.

10. Consumers should be given the freedom to choose their language and their favourite content.

5.4.CONCLUSION

The data collected from the questionnaire survey was interpreted and analysed in the previous chapters. Based on the analysis the research on the topic „The influence of OTT platforms during covid scenario in Ernakulam district“ has been successfully completed. The hypothesis that During pandemic there has been a significant rise in consumption of OTT platforms has been proven right. Since people have started consuming OTT more and more in the lockdown. The statement that OTT platforms have experienced a substantial inorganic growth by taking up the market share of other platforms has been proved.

As India is the world's largest growing OTT industry, this momentum is utilised by the significant increase in the introduction of new OTT players in the market and rapid changes in providing of personalised content. Even the smaller OTT platforms are raising capital from international investors and making a significant impact on the market.

It is quite evident that the arrival of COVID-19 pandemic has aided the OTT platforms with the increased consumption of these by the youth and OTT becoming the most preferred medium. The major benefits incurred from the OTT platforms are

the flexibility of usage, availability of cross-cultural & worldwide entertainment and subscription to the user-friendly unlimited content. Also vital are factors like increasing penetration of smartphones and availability of internet data at competitive prices in India.

Movies and web series are the most watched on OTT among the youth, which are preferred due to the availability of the original content, which are free from censorship. The government's plan to impose censorship on the contents of OTT platforms would have a drastic effect, as most of the users prefer to watch original content - which are unavailable on theatres and other platforms. Most youth are also against the imposition of censorship.

Netflix, Amazon Prime Video and Disney+hotstar are the highest consumed OTT platforms as they satisfy their consumers with the best quality contents and user friendliness. There is also a huge rise in the arrival of regional OTT players in the market. Most of the current users of the OTT platforms are quite satisfied with their experience and majority of the consumers tend to increase their consumption of OTT in future. This trend can be successfully explored by the different OTT platforms. The OTT will further go through many changes and advancements to get the right model.

BIBLIOGRAPHY

REERENCES:

Online articles :

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=effect+of+ott+platforms+during+covid+scenerio+by+experts&btnG=#d=gs_qabs&u=%23p%3DedQiWAoIbqkJ - Ria Patnaik, Reema Shah, Upendra More PalArch's Journal of Archaeology of Egypt/Egyptology 18 (7), 2277-2287, 2021

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=film+industry+and+ott+platform+during+covid19&oq=film+industry+and+ott+platform+during+covid#d=gs_qabs&u=%23p%3Dfqki9MxqBVUJ - PC Revati Devaki, S Dinesh Babu Annals of the Romanian Society for Cell Biology 25 (6), 11307-11313, 2021-

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=rise+of+ott+platforms+during+covid+scenerio&btnG=#d=gs_qabs&u=%23p%3D3dvLbIFgRhGJ - The emergence of OTT platforms during the pandemic and its future scope Nandani Parikh

<https://www.mid-day.com/lifestyle/infotainment/article/the-rise-of-ott-platforms-in-india-during-the-pandemic-23180042> - The rise of OTT platforms in India during the pandemic

<https://corp.phando.com/what-are-the-challenges-faced-by-an-ott-platform/> challenges Faced by OTT platform

https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=survey+about+ott+platforms&oq=survey+about+ott+platform#d=gs_qabs&u=%23p%3D3dvLbIFgRhGJ - A STUDY ON CONSUMER BEHAVIOUR TOWARDS OTT PLATFORMS IN INDIA DURING COVID ERA Bhavyarajsinh D. Jhala and Vivek B. Patadiya

https://www.google.com/url?sa=t&source=web&rct=j&url=https://www.myayan.com/advantages-and-disadvantages-of-ott-platform&ved=2ahUKEwjw5ajf4LHxAhUTxjgGHc2FBrMQFjAFegQIBBAF&usg=AOvVaw1b_ncWN3DaG5Yi-TCdHDuj Advantages and Disadvantages of OTT Platform

<https://www.financialexpress.com/opinion/covid-19-ott-platforms-go-over-the-top-amid-pandemic/2149267/> Covid-19: OTT platforms go over the top amid pandemic
By Vidya Hattangadi,

<https://www.vdocipher.com/blog/2018/01/7-key-ingredients-to-building-a-massively-successful-ott-platform/#:~:text=OTT%20platforms%20allow%20you%20to,your%20favourite%20shows%20anytime%2C%20anywhere> OTT Platforms: 9 Important Things You Should Know in 2022

<https://byjus.com/current-affairs/ott-over-the-top-platform-india/> Over the Top platforms in India byju's app

APPENDIX

QUESTIONNAIRE

A study on Influence of OTT Platform During Covid Scenario in Ernakulam District

Dear Sir/Madam,

We are the students of Department of Commerce(Regular), St. Teresa's College, Ernakulam. As a part of project for the academic year 2019-22, we intend to have a study on "Influence of OTT Platform During Covid Scenerio in Ernakulam District".

We request you to be kind enough to fill up the questionnaire so as to enable us to obtain information about the influence of OTT platform

1. Name: _____

2. Age group*

- Below 18
- 19 - 25
- 25 - 35
- 36 – 50
- Above 50

3. Gender:*

- Male
- Female
- Other

4. Occupational about*

- Student
- Working
- Employed
- Unemployed
- Self employed
- Other

5. Which OTT platform do you heard about*

- Netflix
- Disney + hotstar
- Voot
- Amazon prime
- Zee5
- ALTBalaji
- MX player
- Other

6. How many hours do you spend to watch OTT videos daily*

- 0-2
- 2-4
- More than 4 hours

7. When you start using OTT platform*

- Before Covid Scenerio
- During Covid Scenerio
- None of the above

8. Do you think the habit of watching OTT video content has increased during lockdown period?*

- Highly Increased
- Increased
- Rarely Increased
- Not Increased

9. What is the most significant reason that the Production Houses are investing in OTT platform and moving away from traditional releases?*

- Pandemic
- Small scale production sees more profit in OTT
- They don't see any future in theatre
- Guarantee package from OTT platform
- Others

10. Are you using any paid OTT platform currently?*

- Yes
- No

11. How did you know about current OTT service platform?*

- Friends Recommendations
- Discounts/Referrals
- Advertisement
- Internet
- Via Facebook, instagram etc

12. The most entertainment platform used in pandemic period?*

- Television
- OTT(Netflix, Amazon prime, Hotstar etc)
- YouTube
- Others

13. What do you prefer as a consumer in OTT*

- Paid subscription with no add
- Free subscription with adds

14. Have you ever preferred waiting for a movie release on OTT ?*

- Always
- Many times
- Never
- Depends on time and money

15. How much do you prefer OTT content over traditional theatre releases (OTT v/s movie theatre)*

- 1
- 2
- 3
- 4
- 5

16. Do you find OTT services to be cheap or expensive?*

- Very cheap
- Cheap
- Not very cheap/Not very expensive
- Expensive
- Very Expensive

17. Rank these factors based on how important they are when you are considering OTT There are 5 columns, scroll to see them if you are on a mobile device. (larger number means more important)*

	1	2	3	4	5
Cost of platform					
How frequently you will be using the platform					
The reviews about the platform from friends					
The extra features, discounts and deals being provided					
Role of censorship					
Access to international content					

18. Reasons for not using OTT services *

- Not aware about the service
- Low Safety
- Difficult to understand
- High cost
- Network error
- Low Access

19. From the following which one you prefer*

- Online Streaming platform
- DTH Cable Operators
- None of the above

20. Will there be a decrease in cinema hall footfalls due to OTT platform in future*

- Yes
- No
- Maybe

21. Will you recommend the facilities of OTT platform to your friends and family*

- Strongly recommend
- Rarely Recommend
- Recommend
- Never Recommend

22. Do you think that OTT services are user friendly?*

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

23. Is there any change in your since the lockdown?*

- Highly increased
- Increased
- Neutral
- Decreased

24. How would you rate the satisfaction level regarding OTT services?*

- Highly satisfied
- Satisfied
- Neutral

- Dissatisfied
- Highly dissatisfied

25. Opinion about overall service provided by OTT platform*

- Excellent
- Good
- Neutral
- Poor
- Very Poor

26. Any other suggestions_____*

**A STUDY ON THE PHARMACOGNOSTIC AND PHYTOCHEMICAL
FEATURES OF *AZADIRACHTA INDICA* L., *OCIMUM SANCTUM* L. &
ALOE VERA L. - THE POTENTIAL REMEDY FOR SKIN DISORDERS**

DISSERTATION

**SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
BACHELOR OF SCIENCE**

IN BOTANY

BY

K. R. RESHMA

REG NO: AB19BOT010



**DEPARTMENT OF BOTANY
ST. TERESA'S COLLEGE(AUTONOMOUS)
ERNAKULAM**

2022

CERTIFICATE

This is to certify that the dissertation entitled "A Study on the Pharmacognostic and Phytochemical features of *Azadirachta indica* L., *Ocimum sanctum* L. & *Aloe vera* L. – "The Potential Remedy for Skin Disorders" submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Science in Botany is an authentic work carried out by K. R. RESHMA (Reg. No. AB19BOT010) under the supervision and guidance of Dr. Liza Jacob.



Dr. Liza Jacob,

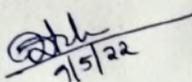
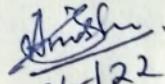
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Supervising Teacher

St. Teresa's College (Autonomous),

Ernakulam

Examiner

1.  Anila N.
7/5/22
2. Anisha S. 
9/5/22

Place: ERNAKULAM

Date: 21-03-2022



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PLACE:

DATE:

K. R. Reshma

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INTRODUCTION

Ever since ancient times, in search for rescue for their disease, the people looked for drugs in nature. The beginnings of the medicinal plants' use were instinctive, as is the case with animals. In view of the fact that at the time there was not sufficient information either concerning the reasons for the illnesses or concerning which plant and how it could be utilized as a cure, everything was based on experience. In time, the reasons for the usage of specific medicinal plants for treatment of certain diseases were being discovered; thus, the medicinal plants' usage gradually abandoned the empiric framework and became founded on explicatory facts. Until the advent of iatrochemistry in 16th century, plants had been the source of treatment and prophylaxis. Nonetheless, the decreasing efficacy of synthetic drugs and the increasing contraindications of their usage make the usage of natural drugs topical again.

For thousands of years, medicinal plants have been used in various cultures of the world as a safe therapeutic modality. The operation of medicinal plants is based on the rich experiences of innumerable healers over centuries, inherited from ancestors, healer-to-healer transfer, or developed through personal experiences over time. Modernity or cultural revolutions have not altered the in-depth wisdom of this natural medical paradigm. Consequently, no modern system of medicine can ordinarily lay claim to it.

Extensive investigations have revealed that medicinal plants in different shapes, either in crude form or pure molecules isolated from them, represent the most ancient mode of medication. Archaeological studies have been provided reasonable evidences that the healing properties of plants were known to peoples in prehistoric time.

The chemicals that are produced by plants are called as phytochemicals. These are produced by the plant's primary and secondary metabolism. These phytochemicals are important for the plants to thrive or thwart other plants, animals, insects and microbial pests and pathogens. They also help plants and protect them from disease and damage caused by environmental hazards like pollution, UV, stress and draught. They are used as traditional medicine and as poisons from ancient days.

Medicinal plants are a gift to us from the nature as they provide a number of health benefits to us. In India these medicinal plants are used for about centuries for their properties and are still used to this date.

India has a variety of traditional medical systems like Ayurveda, siddha, unani and a huge class of ethnomedicine. This knowledge of medicine was disappeared due to the western culture that has been on us on the past and is reappearing again as their importance have been realized and lack of side effects are also an important aspect in these types of traditional medicine.

As per a report by World Health Organization (WHO), over 80% of the people of developing countries are relying on the traditional medicines that are extracted from the plants for their primary health needs.

Use of these traditional medicines for the preparation of modern medical preparations is indispensable and thus 'Phytomedicines' are a link between the traditional and modern medicine.

Plants provide the basic nutrients needed for the growth of animals and humans like proteins, carbohydrates, fats, vitamins and oils minerals. The phytochemicals are majorly classified as primary and secondary metabolites. The primary metabolites are responsible for the basic development of the plant which includes the sugars, amino acids, proteins, nucleic acids, chlorophyll, etc

Secondary metabolites are those which are needed for the survival of the plants in a harsh environment. They form the smell, colour and taste of the plants and secondary metabolites such as flavonoids, tannins, saponins, alkaloids, steroids, phytosterols are found to have other commercial applications like they can be used as colouring agents, as drugs as flavouring agents, insecticides, pesticides, anti-bacterial and antifungal products. Moreover, they can also be used to protect humans from many diseases like cancer, diabetes, cardiovascular diseases, arthritis and aging and so on.

REVIEW OF LITERATURE

Plants constitutes majority of the living population of earth. Among plants, there are so many medically relevant plants that are to be recognized, analyzed and utilized to treat various diseases. Ever since technology has advanced, new methods have been identified to extract and utilize different plant varieties.

Even now scientists are constantly trying to find out new drugs with different pharmacological values such as anti-inflammatory, anti-microbial, anti-fungal properties, etc. Phytochemistry focuses around the study of various chemical components that are accumulated in plants as a part of their own metabolism and biological functions. It includes both quantitative and qualitative estimation of active components such as alkaloids, flavonoids, phenol, etc.

Skin disorders and many other dermatologically related issues are a major concern of the population. There are many herbal remedies available for these problems but they are still unknown to people. Several researches are ongoing in order to find the potential of different medicinal plants for curing various diseases.

Balakumar et al (2011) studied about the Antifungal activity of *Ocimum sanctum L.* on clinically isolated dermatophytic fungi. The leaves were collected and phytochemical analysis was done on various extracts of powdered sample. The extract showed the presence of various secondary metabolites such as tannin, steroids, etc which may be responsible for the inhibition of various dermatophytic fungi.

In a study conducted by P. Prakash et al (2004), therapeutic uses of *O.sanctum L.* with a special note on Eugenol revealed that Eugenol is a major constituent of essential oil and is capable of possessing anti-fungal and anti-viral properties that can be major asset against dermatological problems.

KP Sampath Kumar et al (2010) revealed about the importance of ursolic acid which helps in retaining the elasticity in face and prevent it from ageing and causing wrinkles.

In the phytochemical analysis of *O.sanctum L.*, Priya Pachcal et al (2019) studied about the presence of cirsilineol, circimaritin, isothymusin, apigenin and rosameric acid in the isolated aqueous extract of *O.sanctum L.* which may be useful for treating microbial and fungal infections. From the study, we can conclude that the extract can be used for new formulations and potent antimicrobial drugs of natural origin.

Faiz et al (2009) conducted a study on *Azadirachta indica* to rationalize its traditional use. The isolated phytoconstituents extracted from the leaves of *A. indica* was taken in two concentrations – 50mg/ml and 75 mg/ml and were applied against *Staphylococcus aureus*, *Coryne bacterium bovi* and *E. coli* using disc diffusion method. The results noted was that 75mg/ml concentration was more effective than 50mg/ml.

Garima, Verma and Munna (2014) conducted an objective study to understand the potential of *A. indica* for curing skin ailments. The results suggested that leaves of *A. indica* for curing have some antibacterial and antioxidant property which is due to the presence of certain phytoconstituents.

Melesa et al (2016) conducted a phytochemical analysis of bark and seed extracts of *A. indica*. The data resulted positive for glycosides, phytosterols, polyphenols and saponin. *A. indica* thus found very active against all gram-positive and gram-negative bacteria which was the aim of study

The studies conducted by Alka et al (2018) on *A. indica* showed different properties like antibacterial, antifungal, and antioxidant. The phytochemical analysis on *A. indica* resulted positive for saponins, tanins, phenols, proteins, glycoside, alkaloids, flavanoids, carbohydrate, terpenoids. The aim was to screen out the active components and test the antibacterial activity in different solvents.

Different mechanisms have been proposed for the wound-healing effects of *A. vera* L. gel, which include keeping the wound moist, increasing epithelial cell migration, more rapid maturation of collagen, and reduction in inflammation.

In a study conducted by Davis et al (1994) reported that a high molecular weight polypeptide constituent from the gel demonstrated a healing effect on excisional wounds in rats.

A. vera L. has excellent anti-aging effect by producing the collagen and elastin fibres making the skin more elastic and less wrinkled as reported in an in vivo study conducted on mouse ears by Davis et al (1993).

Habeeb et al (2007) has reported the activity of *A. vera* L. inner gel against both Gram-positive and Gram-negative bacteria has been demonstrated by several different methods.

Dinesh et al (2012) conducted a photochemical analysis to examine the phytochemical parameters of *A. vera* L. which can be used as a tool for its standardization. Phytochemical analysis revealed the presence of alkaloid, carbohydrate, tannin, steroid, triterpenoid and glycoside. The results indicate that the plant extract are rich in berberine and gallic acid implying their importance to human health.

MATERIALS AND METHODS

The study was conducted in order to analyse the pharmacognostic and phytochemical properties of the plants *Azadirachta indica* L. coming under the family Meliaceae, *Ocimum sanctum* L. coming under the family Lamiaceae and *Aloe vera* L. coming under the family Asphodelaceae.

The various parameters utilized for the analysis of the plants are the following:

PHYTOCHEMICAL ANALYSIS

1. Detection of Alkaloid

To prepare the plant extract, 1 gm of powdered extract was homogenised in 80 percent ethanol (10ml). The homogenate is centrifuged in 15000 rpm for 7 minutes and the supernatant was collected. It is then subjected to various tests using Mayer's, Wagner's and Dragendoff's reagent.

Mayer's Reagent

The reagent was prepared by dissolving 1.36 gm of HgCl_2 in 60 ml of distilled water (Solution A) and 5 gm of KI was dissolved in 10ml of distilled water (Solution B). Both of the solutions were mixed and made up to 1000ml with distilled water in a conical flask. The extract were acidified with HCl before adding Mayer's reagent. A slight yellowish coloured precipitate indicates presence of Alkaloid.

Wagner's Reagent

The reagent was prepared by dissolving 1.27 gm of Iodine and 2.9 gm gm of KI in 5ml of distilled water and the solutions was made upto 100ml in a conical flask. A reddish-brown precipitate indicates the presence of Alkaloid.

Dragendoff's reagent

The reagent was prepared by dissolving 8 g of Bismuth Sulphate in 20 ml of conc. HNO₃ (Solution A) and 27.2 g of KI in 50 ml of distilled water (Solution B). The solution were mixed and the supernatant was decanted. It was made upto 100 ml with distilled water. A brick red precipitate indicates the presence of Alkaloid.

2. Detection of Flavanoid

A small amount of sample was taken in a test tube, add 2 ml of NaOH followed by 2 ml of H₂SO₄. The yellow colour of NaOH changes by adding diluted acid. This indicates the presence of Flavanoids.

3. Detection of Saponin - Foam test

Take 1 gm of dried powdered plant material and add 20 ml distilled water into the test tube. It was shaken for about 10 minutes. Formation of frothy solution indicates the presence of saponin.

4. Detection of Tannin - Alkaline reagent test

Aqueous extract of the plant was taken. The filtrate was mixed with 2 ml of 5% of Ferric Chloride in a test tube. Formation of green, blue or black precipiate indicated the presence of Tannin.

5. Detection of Steroid - Salkowski's test

The ethanol extract of the sample was treated with a few drops of Conc. sulphuric acid. A red colouration in the lower layer of the solution indicates the presence of Steroids.

6. Detection of Bitter

Take 1 gm of powdered sample in a test tube, shake it with ethyl alcohol followed by ethyl acetate. Formation of green colour shows the presence of Bitter.

7. Detection of Resin

A small amount of powdered sample was taken in the test tube and add a few drops of 50% HNO₃. Formation of brown colour indicates the presence of resins.

8. Detection of carbohydrates

Molisch's Reagent

2 ml of the test sample (aqueous extract) was taken in a test tube, add 2 drops of Molisch's reagent into the extract and mix thoroughly. Add 1 ml of Conc. H₂SO₄ along the margins of the test tube without shaking. Formation of a purple ring between the junctions of the solution indicates the presence of carbohydrates.

Benedict's Reagent

1 ml of the aqueous extract of the sample was taken in a test tube, add 5 ml of Benedict's reagent into the extract and mix it well. It was then kept in a water bath for 5 minutes. Formation of orange colour indicates the presence of carbohydrate.

Fehling's Reagent

1 ml of Fehling's reagent 'A' was mixed with Fehling's reagent 'B' in a test tube. To this add few drops of aqueous extract of test solution and boiled in a water bath for 5 minutes. Formation of a deep orange red colour indicates the presence of carbohydrate.

9. Detection of Protein

Biuret's test

2 ml of test solution is taken in a test tube, add few drops of CuSO_4 solution followed by 40% NaOH solution and mixed thoroughly. Formation of purple colour indicates the presence of Protein.

Xanthoproteic Test

In a test tube, add equal volumes of the test solution and Conc. HNO_3 (0.5 ml). It was mixed and allowed to cool upto the room temperature. Formation of a light yellowish precipitate indicates the presence of Protein.

PHARMACOGNOSTIC ANALYSIS

1. ORGANOLEPTIC EVALUATION

2. BULK DENSITY ANALYSIS OF THE FINE POWDER

3. FOLIAR MICROSCOPIC STUDIES

Stomatal type and stomatal index

Palisade ratio

Vein islet number Vein termination number

ORGANOLEPTIC EVALUATION

Organoleptic evaluation means the study of drugs using organs of senses. For this the colour, taste, odour, touch, texture of the drug was noted.

BULK DENSITY ANALYSIS OF THE FINE POWDER

Using the finely powdered drug bulk density analysis was carried out. About 5 g of the herbal powder was weighed out. This powder was transferred into a 100 ml measuring cylinder. Then the initial volume of the powder was noted. After this the cylinder was tapped thrice from the height of 3cm to obtain a final volume. The final volume was noted. Then the bulk density of the plant was calculated using the formula:

$$\text{Bulk density} = \frac{\text{Initial volume of the herbal powder}}{\text{Final volume of the herbal powder}}$$

MICROSCOPIC STUDIES

1. Stomatal type and stomatal index

The stomatal index of the leaf is the ratio of the number of stomata to the total number of stomata and epidermal cells. For determining the stomatal index fresh leaves of the plant were taken. It was then stained with saffranin. Then the peel was placed in clean glass slide and a drop of glycerine is put over it and covered with a coverslip without air bubbles. Then the slide was examined under the compound microscope. After this type of stomata and number of epidermal cells and stomata in the field were noted. The stomatal index was calculated using the formula:

$$\text{Stomatal index} = (S/S+E) \times 100 ,$$

where S = Number of stomata per unit area

$$E = \text{Number of epidermal cells in the same area}$$

2. Palisade ratio

Palisade ratio is the average number of palisade cells under one epidermal cell. Fresh leaves of the plants were taken. Then they were boiled with trichloroacetic acid solution. The sample was then mounted in glycerine and observed under microscope. Then the focal length of the microscope was adjusted to see the palisade cells were counted from each field below four adjusted epidermal cells and the ratio was determined by dividing total number of palisade cells by 4. The average palisade ratio was taken. Palisade ratio was calculated using the formula:

$$\text{Palisade ratio} = \frac{\text{Number of palisade cells}}{\text{Number of epidermal cells}}$$

3. Determination of vein-islet number

It is defined as the number of vein islet per sq.mm of the leaf surface midway between the midrib and the margin. Leaf pieces were put in trichloroacetic acid and when the leaves become transparent, they were mounted in glycerine. A camera lucida was attached to the microscope. A paper was placed and the vein islet was traced by looking through the microscope when the superimposed image of the leaf portion and the paper were seen at the same time. The number of vein-islet in each 4cm×4cm square was counted and the average vein-islet was calculated.

4. Determination of vein termination number

Vein termination number is the number of veinlet terminations per mm of leaf surface. Leaf pieces were placed in trichloroacetic acid. When the leaves become transparent and clean, one of the pieces was mounted in glycerin. Camera lucida drawings were made and the number of vein termination present within the 4cm×4cm square was counted and the average vein termination number was calculated.

OBSERVATION AND RESULTS

For the present investigation *Azadirachta indica* L. of family Meliaceae , *Ocimum sanctum* L. of family Lamiaceae and *Aloe vera* L. of family Asphodelaceae was used as source plants because of their importance in medical field. Observations are recorded for pharmacognostic and phytochemical study. Morphology, anatomy and microscopic studies were conducted.

PHARMACOLOGICAL ANALYSIS

MORPHOLOGY

Tulsi (*Ocimum sanctum* L.)

O. sanctum L. is an aromatic perennial shrub which is erect and branched and grows upto a height of 30-60 cm in length. Stems are hairy and leaves are simple, petiolated and purplish-green in colour, it grows upto the length of 3.3 - 5.5 in mature plants and 1.2 -2.5 in younger ones. They are strongly scented and the leaves have slightly toothed margin and are arranged in opposite and decussate phyllotaxy. Flowers are placed in closed whorls or elongated racemes. Tap roots are present in the case of *O. sanctum* L.

Aloe vera (*Aloe vera* L.)

A. vera L. is a succulent plant, an evergreen perennial plant. It grows upto 60-100 cm in height. Its leaves are thick and fleshy. They may be green or grey in color with some varieties showing white flecks on their upper and lower stem surfaces. The leaves may produce a yellow, milky latex. The plant has triangular, fleshy leaves with serrated edges, yellow tubular flowers and fruits that contain numerous seeds.

Neem (*Azadirachta indica* L.)

A. indica is a medium-sized tree, reaching 15 to 30 m in height, with a large rounded crown up to 10-20 m in diameter. It is mainly evergreen but sometimes shed its leaves during the dry season. Neem has a deep taproot and is a mycorrhizal-dependent species.

TAXONOMIC CHARACTERS

Tulsi

- Habit : Erect shrub.
- Stem : Quadrangular with hair present.
- Leaves : Simple, slightly toothed margin with ovate shape, exstipulate.
- Inflorescence : Verticillaster.
- Flowers : Flowers are arranged in closed whorls in elongated racemes; Bisexual; zygomorphic
- Calyx : 5 sepals present
- Corolla : 5 petals present; bilabiate; gamopetalous
- Androecium : 4 stamens present
- Gynoecium : Hypogynous; superior ovary and bicarpellate

Aloe vera

- Habit : A succulent plant
- Stem : it is a stemless or short stemmed plants
- Leaves : Leaves are succulent, erect, and form a dense rosette; 60 Cm in length. The leaves may produce a yellow, milky latex
- Inflorescence : Spadix inflorescence present.
- Flowers : Flowers have a yellow tubular corolla which is upto 2-3 cm, Complete, perfect, actinomorphic flowers. The color of the flower is ranging from white to yellow to near red.
- Calyx : 3 sepals present
- Corolla : 3 petals. The calyx and corolla are fused into a single, yellowish tube.

Androecium : 6 unfused stamens

Gynoecium : Ovary superior with 3 locules and numerous seeds. The fruit is a capsule at maturity.

Neem

Habit : Medium – sized to large evergreen to semi-desiduous tree, upto 30 m tall.

Stem : The bark is dark grayish on the outside and reddish brown inside, and has numerous oblique furrows.

Leaves : Alternate, exstipulate, compound, imparipinnate; 7-15 shortly stalked pinnae are lanceolate, oblique, serrate, acuminate, unicostate reticulate.

Inflorescence : Compound racemose inflorescence

Flowers : Bracteate, actinomorphic, hermaphrodite, complete, hypogynous and scented.

Calyx : 5 sepals, gamosepalous, light green, valvate

Corolla : 5 petals, polypetalous, imbricate

Androecium : made up of 10, or 8-12 monadelphous

Gynoecium : tricarpyllary, syncarpous, superior, trilocular, two ovules in each locule, axile placentation, style simple, stigma trifid.

Fruit : Drupe

Seed : Fruit one-seeded.

ORGANOLEPTIC EVALUATION

The organoleptic evaluation was done using the powdered leaf sample of the plants.

Neem

In *A. indica* it was found that the color is green, texture is soft and taste is strong bitter taste and odour is characteristic with a slight herbal scent.

Tulsi

In *O. sanctum* L. it was found that the color is green, texture is soft and taste is bitter and odour is characteristic.

Aloe vera

In *A. vera* L. it was found out that the color is dark green or maybe light green, texture is soft, taste is bitter and odour is characteristic.

BULK DENSITY ANALYSIS

The bulk density of the leaf powder was studied and noted. (Table-1)

FOLIAR MICROSCOPIC STUDIES

STOMATAL INDEX

Neem

The stomata of *A.indica* L is amphistomatous and the number of stomata was found to be greater in adaxial surface as compared to the abaxial surface and the stomatal *index* was found to be 34.17. (Table-1)

Tulsi

The stomata of *O.sanctum* L. is amphistomatous and the number of stomata was found to be greater in adaxial surface as compared to abaxial surface. The stomatal index was found to be 55.7. (Table-1)

Aloe vera

The stomata of *A. vera* L. is amphistomatous and the number of stomata was found to be greater in abaxial surface as compared to the adaxial surface. The stomatal index was found to be 10. (Table-1)

PALISADE RATIO

The palisade ratio of the plant *A.indica* was found to be 5. (Table- 1)

The palisade ratio of the plant *O.sanctum* L. was found to be 6.5. (Table-1)

The palisade ratio of the plant *A. vera* L. was found to be 4. (Table- 1)

VEIN ISLET AND VEIN TERMINATION NUMBER

Vein islet number and Vein termination number of *A.indica* was found to be 9 and 22. (Table-1)

Vein islet number and Vein termination number of *O.sanctum* L. was found to be 7 and 21.
(Table-1)

Vein islet number and Vein termination number of *A.vera* L. was found to be 6 and 19 (Table-1).

All the above-mentioned studies were performed in triplicates and the average value was taken.

PHYTOCHEMICAL ANALYSIS

The powdered and water extract of test sample (neem, tulsi and aloe vera) are subjected for the identification of various phytochemicals and the results are recorded in plates

Detection of Alkaloids

The detection of alkaloids was done using the three reagents namely Mayer's, Wagner's and Dragendoff's reagents. (Table-3)

Neem

The sample tested with Mayer's reagents shows slightly yellow coloured precipitate, Wagner's reagent shows reddish brown precipitate and Dragendoff's reagent shows brick red precipitate. (Plate-1)

Tulsi

The sample tested with Mayer's reagents shows slightly yellow coloured precipitate, Wagner's reagent shows reddish brown precipitate and Dragendoff's reagent shows brick red precipitate. (Plate-1)

Aloe vera

The sample tested with Mayer's reagents shows slightly yellow coloured precipitate, Wagner's reagent shows reddish brown precipitate and Dragendoff's reagent shows brick red precipitate. (Plate-1)

Detection of Flavonoid

For the detection of flavonoids, the test samples were treated with NaOH, then diluted acid was added. (Table-2)

Neem

Colour changes during dilution, which indicates presence of flavonoids. (Plate-2)

Tulsi

Colour changes during dilution, which indicates presence of flavonoids. (Plate- 2)

Aloe vera

No colouration was observed, which indicates absence of flavonoids. (Plate -2)

Detection of Saponin

The Detection of Saponin was done by shaking the powdered extract of the test samples vigorously with water. (Table-2)

Neem

Formation of froth was observed, which indicates its presence. (Plate-3)

Tulsi

Formation of froth was observed, which indicates its presence. (Plate-3)

Aloe vera

No froth was formed, which indicates its absence. (Plate-3)

Detection of Tannins

For detecting the presence of tannin, the test samples were treated with 5% Ferric Chloride solution in a test tube. (Table-2)

Neem

A green colour was observed, which indicates the presence of tannins. (Plate -4)

Tulsi

A green colour was observed, which indicates the presence of tannins. (Plate-4)

Aloe vera

No green colouration was observed, which indicates the absence of tannins. (Plate-4)

Detection of Steroids

For detecting the presence of steroids, the ethanol extract of test samples was treated with conc. Sulphuric acid. (Table-2)

Neem

A red layer was formed at the bottom of the test tube, which indicates the presence of steroids. (Plate-5)

Tulsi

A red layer was formed at the bottom of the test tube, which indicates the presence of steroids. (Plate-5)

Aloe vera

A red layer was formed at the bottom of the test tube, which indicates the presence of steroids. (Plate-5)

Detection of Bitter

For the detection of bitter, the powdered extract was treated with ethyl alcohol followed by ethyl acetate. (Table-2)

Neem

A green colouration was observed which indicates the presence of bitter. (Plate -6)

Tulsi

A green colouration was observed which indicates the presence of bitter. (Plate -6)

Aloe vera

A green colouration was observed which indicates the presence of bitter. (Plate -6)

Detection of Resin

For the detection of resin, the test samples were treated with conc. Nitric acid. (Table – 2)

Neem

A dark brown colouration was observed, which indicates the presence of resin. (Plate-7)

Tulsi

A dark brown colouration was observed, which indicates the presence of resin. (Plate-7)

Aloe vera

A dark brown colouration was observed, which indicates the presence of resin. (Plate-7)

Detection of Carbohydrates

The test samples were treated with Molisch's, Benedict's and Fehlings's reagents. (Table-4)

Neem

The test sample shows the formation of a brown ring in Molisch's test, an orange red colouration in Benedict's and red colouration in Fehling's test. This indicates the presence of carbohydrates. (Plate-8)

Tulsi

The test sample shows the formation of a brown ring in Molisch's test, an orange red colouration in Benedict's and red colouration in Fehling's test. This indicates the presence of carbohydrates. (Plate-8)

Aloe vera

The test sample shows the formation of a brown ring in Molisch's tests, an orange red colouration in Benedict's and red colouration in Fehling's test. This indicates the presence of carbohydrates. (Plate-8)

Detection of Proteins

The detection of protein is done by conducting Biuret's and Xanthoproteic test. (Table -5)

Neem

The test sample shows the formation of purple colouration in Biuret's test and orange precipitate in Xanthoproteic test. (Plate-9)

Tulsi

The test sample shows the formation of purple colouration in Biuret's test and orange precipitate in Xanthoproteic test. (Plate -9).

Aloe vera

The test sample shows the formation of purple colouration in Biuret's test and orange precipitate in Xanthoproteic test. (Plate-9)

TABLE-1
MICROSCOPIC ANALYSIS

SI No.	Characteristics	Observation		
		NEEM	TULSI	ALOEVERA
1	Stomatal index	55.7	34.17	10
2	Palisade ratio	5	6.5	4
3	Vein islet number	9	7	6
4	Vein termination number	22	21	19

TABLE-2
PHYTOCHEMICAL ANALYSIS

DETECTION OF VARIOUS PHYTOCHEMICALS IN THE PLANT LEAF POWDER

	Saponin	Tannin	Steroid	Resin	Bitter	Flavonoid
NEEM	+	+	+	+	+	+
TULSI	+	+	+	+	+	+
ALOEVERA	-	-	+	+	-	-

TABLE-3**DETECTION OF ALKALOIDS**

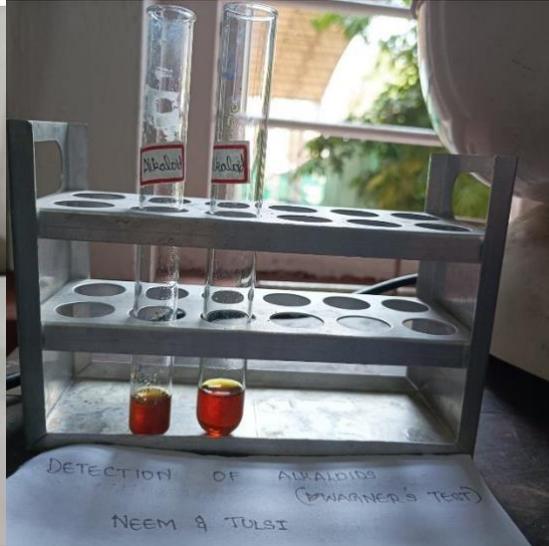
	Mayer's reagent	Dragendroff reagent	Wagner's reagent
NEEM	+	+	+
TULSI	+	+	+
ALOEVERA	+	+	+

TABLE-4**DETECTION OF CARBOHYDRATES**

	Molisch's test	Benedict's test	Fehling's test
NEEM	+	+	+
TULSI	+	+	+
ALOEVERA	+	+	+

TABLE-5
DETECTION OF PROTEIN

	BIURET TEST	XANTHOPROTEIC TEST
NEEM	+	+
TULSI	+	+
ALOEVERA	+	+



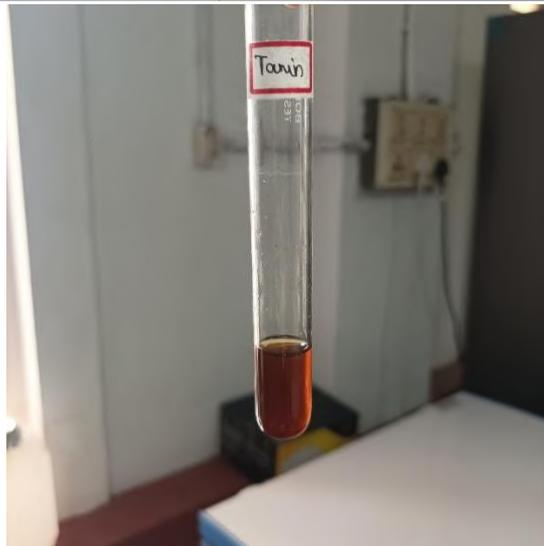
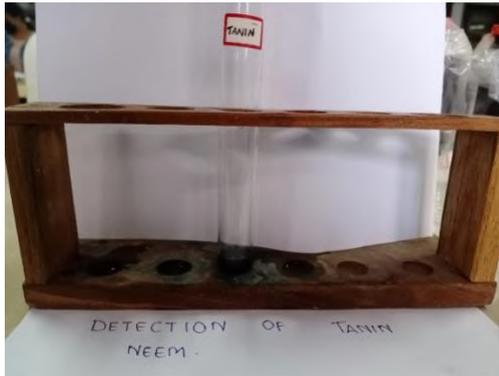
TEST FOR ALKALOID (PLATE: 1)



TEST FOR FLAVANOID (PLATE: 2)



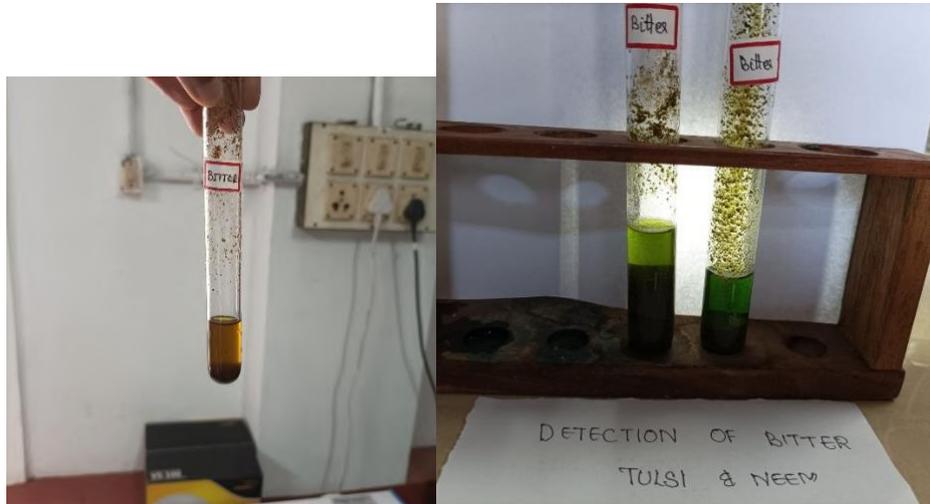
TEST FOR SAPONIN (PLATE: 3)



TEST FOR TANNIN (PLATE: 4)



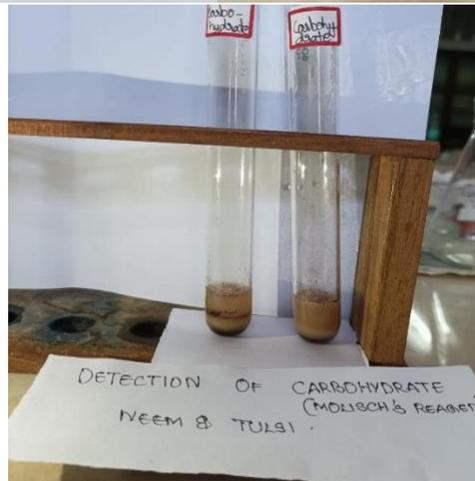
TEST FOR STEROIDS (PLATE: 5)



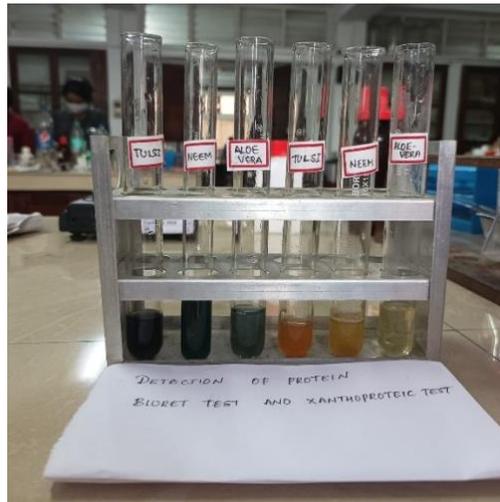
TEST FOR BITTER (PLATE: 6)



TEST FOR RESIN (PLATE: 7)



TEST FOR CARBOHYDRATE (PLATE: 8)



TEST FOR PROTEIN (PLATE: 9)

DISCUSSION

Medicinal plants have long been utilised as a major source of pharmaceutical products due to their significance in treating and curing diseases. Their importance and usage were first discovered by various communities those where tightly knit with nature. They studied about various parts of plants and made different formulations that may or may not have the involvement of many other plants or plant produces. With the help of advancing technology the whole process of trying out different combinations and their effects have been made much more easier and feasible. Presently they are carrying out different experiments and studies that will reveal the full potential of different plants. By studying about the various active principles present in a plant, it is easier to predict different diseases that can be cured with the plant.

Azadirachta indica is a natural herb, commonly known as neem is a member of the mahogany family, Meliaceae. *A. indica* has been extensively used in Ayurveda, Unani and Homoeopathic medicine and has become a cynosure of modern medicine. Nearly all parts of the neem tree are useful, and many of its medicinal and cosmetic uses are based on its antibacterial and antifungal properties.

In the present study, *A. indica* is found to be Amphistomatous with a stomatal index of 55.7. The palisade ratio of *A. indica* is 5 and its vein islet and vein termination are 9 and 22 respectively which emphasize the importance of drug authentication.

The phytochemical analysis of *A. indica* conducted in this present study gave a positive result for the presence of protein, carbohydrates, alkaloids, saponins, tannins, steroids, resins, bitter and flavonoids which plays a key role in imparting various medicinal properties to the plant and these results are found to be in agreement with the studies conducted by Mohamed and Ashraf *et al* (2019).

Ocimum sanctum. L is an aromatic perennial shrub which is erect, branched and belongs to the family Lamiaceae. It is widely distributed and is commonly found in every households because of its therapeutic values. It is collected from the wild and is used to make different formulations in order to heal various diseases, especially in India. Any part of the plant can be utilised to make medicines. It can be taken raw from the wild or it's extract can be used. It has anti-inflammatory, antibacterial, antifungal, diuretic and several other properties.

Balakumar et al (2011) studied about the Antifungal activity of *O. sanctum* on clinically isolated dermatophytic fungi. The leaves were collected and phytochemical analysis was done on various extracts of powdered sample.

In the present foliar study of *O. sanctum* L., it is found to be amphistomatous but the number of stomata in the adaxial surface was comparatively greater than in the abaxial surface.

The stomatal index is 55.7, palisade ratio is 6.5, the vein islet and vein termination number is 7 and 21 respectively. These characters are important for drug authentication.

The plant was subjected to various phytochemical analysis by extracting with various solvents. It helps in determining the active principles present within the plant so it can be utilised to form different formulations for treating various diseases. It was tested positive for saponin, tannin, steroid, resin, bitter, Flavonoid, alkaloids, carbohydrates and protein. Detection of carbohydrate have three tests, they are Molisch's, Fehling's and Benedict's test. Detection of Protein have two tests, they are Biuret's and Xanthoproteic tests.

A. vera L. is a succulent plant grown around the world. It's had known medical uses that date back to ancient times. Both the juice from the leaf and the thicker gel may offer health benefits. *A. vera* L. is commonly used in traditional medicine to treat skin disorders.

A 2013 study from Iran evaluated the effects of aloe lotion in 60 people undergoing radiation therapy. A thin layer of lotion was applied to half of the irradiated area of skin after treatment for four weeks. The researchers found that the areas treated with aloe had a lower grade of dermatitis than areas without the aloe.

A. vera L. has various medicinal properties like anti-inflammatory, antibacterial, antiviral, and antitumor properties. Benefits associated with *A. vera* L. have been attributed to the polysaccharides contained in the gel of the leaves.

In the present foliar study of *A. vera* L., it is found to be amphistomatous and the number of stomata was found to be greater in abaxial surface as compared to the adaxial surface. The stomatal index was found to be 10, palisade ratio is 4, vein islet and vein termination number is 6 and 19 respectively which are important for drug authentication.

These studies are good enough proof that drug has immense potential as a therapeutic. So proper diagnosis, knowledge of the traditional medicine, and implementation of that knowledge to the treatment plan are important in ensuring success.

SUMMARY AND CONCLUSION

Medicinal herbs has been used as a source for treating various kinds of diseases. It has proved to be useful and efficient for treating different types of ailments. The discovery of active principles as the reason behind it's healing potential has changed the whole perspective and more studies were implemented for screening the phytochemical and pharmacognostic potential of plants.

The present work was done to study about the pharmacognostic and phytochemical potential of *Azadirachta indica* L., *Ocimum sanctum* L. and *Aloe vera* L. in treating various skin disorders caused due to fungal or microbial actions. Pharmacognostic studies include morphological and foliar study. Foliar study includes stomatal index, palisade ratio, vein islet and vein termination number. Phytochemical studies involved testing the presence of saponin, tannin, steroids, resin, alkaloids, carbohydrates and proteins. Their involvement and the reason behind their action against skin disorders were analysed.

Azadirachta indica L. is a natural herb, commonly known as neem is a member of the mahogany family, Meliaceae. From the results of various pharmacological and phytochemical tests conducted, it can be concluded that *A. indica* has the ability to various treat skin disorders.

Ocimum sanctum L. is an aromatic perennial shrub coming under the family Lamiaceae. It has a long history in treating various type of skin disorders. It was taken and several tests for pharmacognostic and phytochemical analysis was carried out. It was tested positive for all the above-mentioned phytochemicals.

A. vera L. is an herbaceous and perennial plant that belongs to the Liliaceae family and used for many medicinal purposes. *A. vera* L. is a medicinal plant, traditionally used to improve skin integrity.

The pharmacological attributes of *A. vera* L. have been revalidated in modern sciences through various in vivo and in vitro studies. *A. vera* L. is a promising herb with its various applications in medicine. It was taken for pharmaceutical and photochemical analysis and contain many compounds.

In summary, these plants can play vital roles in disease prevention. However, conscious efforts need to be made to properly identify, recognise and position medicinal plants in the design and implementation. Efforts must be geared towards measures that will enhance the effectiveness, efficacy and rational use of medicinal plants.

REFERENCE

- Balakumar, S., Rajan, S., Thirunalasundari, T. and Jeeva, S., 2022. *Antifungal activity of Ocimum sanctum Linn. (Lamiaceae) on clinically isolated dermatophytic fungi.*
- Cesa, S., Sisto, F., Zengin, G., Scaccabarozi, D., Kokolakis, A., Scaltrito, M., Grande, R., Locatelli, M., Cacciagrano, F., Angiolella, L., Campestre, C., Granese, A., Chimenti, P. and Basilico, N., 2022. *Phytochemical analyses and pharmacological screening of Neem oil.*
- Encyclopedia Britannica. 2022. *crowberry | Description, Bush, Fruits, Distribution, & Species.* [online] Available at: <<https://www.britannica.com/plant/Empetrum>>
- En.wikipedia.org. 2022. *Azadirachta indica - Wikipedia.* [online] Available at: <https://en.wikipedia.org/wiki/Azadirachta_indica>
- Encyclopedia Britannica. 2022. *neem | Description & Uses.* [online] Available at: <<https://www.britannica.com/plant/neem-tree>>
- F. Bradbury et al., F., 2022. [online] Available at: <https://www.researchgate.net/profile/Valerie-Ferro/publication/6277281_Screening_methods_used_to_determine_the_anti-microbial_properties_of_Aloe_vera_inner_gel/links/5f3a397aa6fdcccc43cfc7d3/Screening-methods-used-to-determine-the-anti-microbial-properties-of-Aloe-vera-inner-gel.pdf>
- Ijariie.com. 2022. [online] Available at: <http://ijariie.com/AdminUploadPdf/A_GUIDE_TO_PHYTOCHEMICAL_ANALYSIS_ijariie9430.pdf>
- LOPAMUDHRA, S. and BHADHRA, P., 2020. *A Review Paper on Tulsi Plant (Ocimum sanctum L.).* [online] www.researchgate.net/. Available at: <https://www.researchgate.net/profile/Preetha-Bhadra-2/publication/342674549_A_Review_Paper_on_Tulsi_Plant_Ocimum_sanctum_L/links/5fb430f0299bf10c36898243/A-Review-Paper-on-Tulsi-Plant-Ocimum-sanctum-L.pdf>
- Medicalnewstoday.com. 2022. *Neem: Benefits, risks, and how to use.* [online] Available at: <<https://www.medicalnewstoday.com/articles/325048#how-to-use>>

PRAKASH, P. and GUPTA, N., 2005. *THERAPEUTIC USES OF OCIMUM SANCTUM LINN (TULSI) WITH A NOTE ON EUGENOL AND ITS PHARMACOLOGICAL ACTIONS: A SHORT REVIEW*. [online] Academia.edu. Available at:
<https://www.academia.edu/28689049/THERAPEUTIC_USES_OF_OCIMUM_SANCTUM_LINN_TULSI_WITH_A_NOTE_ON_EUGENOL_AND_ITS_PHARMACOLOGICAL_ACTIONS_A_SHORT_REVIEW>

Panchal, P. and Parvez, N., 2019. *Phytochemical analysis of medicinal herb (ocimum sanctum)*. [online] Peertechzpublications.com. Available at:
<<https://www.peertechzpublications.com/articles/IJNNN-5-129.php>>

Patel, D., Patel, K. and Dhanabal, S., 2022. *Phytochemical standardization of Aloe vera extract by HPTLC techniques*.

R. H. Davis, J. J. Di Donato, G. M. Hartman and R. C. Hass, "Anti-Inflammatory and Wound Healing Activity of a Growth Substance in Aloe vera," *Journal of the American Podiatric Medical Association*, Vol. 84, No. 2, 1994, pp. 77-81. - *References - Scientific Research Publishing*. [online] Available at:
<<https://www.scirp.org/reference/ReferencesPapers.aspx?ReferenceID=996279>>

SAMPATH KUMAR, K., BHOWMIK, D. and CHANDIRA, K., 2010. *Research Journal of Pharmacognosy and Phytochemistry*. [online] Rjpponline.org. Available at:
<<https://rjpponline.org/Issues.aspx?VID=2&IID=2>>

MALWARE DETECTION USING NAVE BAYES ALGORITHM

ST. TERESA'S COLLEGE (AUTONOMOUS)

AFFILIATED TO MAHATMA GANDHI UNIVERSITY



PROJECT REPORT

In partial fulfilment of the requirements for the award of the degree of

BCA (CLOUD TECHNOLOGY AND INFORMATION

SECURITY MANAGEMENT)

BY

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&

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MALWARE DETECTION USING NAVE BAYES ALGORITHM

DECLARATION

We, undersigned hereby declare that the project report **malware detection using naive bayes algorithm**, submitted for partial fulfilment of the requirements for the award of degree of BCA St. Teresa's College (Autonomous), Ernakulam (Affiliated to Mahatma Gandhi University), Kerala is a bonafide work done by us under supervision of Mrs. Archana Menon P. This submission represents our ideas in our own words and where ideas or words of others have been included. We have adequately and accurately cited and referenced the original sources. We also declare that we have adhered to the ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in our submission. We understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not previously formed the basis for the award of any degree, diploma or similar title of any other University.

Place: Ernakulam

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Date: 15-03-2022

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CERTIFICATE

This is to certify that the report entitled **Malware Detection Using Nave Bayes Algorithm** submitted by **Mary Tiny Bivera** and **Revathi U** to St. Teresa's College, Cochin in partial fulfilment of the requirements for the award of the Degree of BCA in CT & ISM is a bonafide record of the project work carried out by him/her under my/our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Archana
4/4/22
ARCHANA MENON P

Internal Supervisor



Fov Head of the Department

Amey
4/4/22

External Supervisor

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ABSTRACT

The governments of developed countries already have the policy framework of national anti-virus software addressing the security issues. Developing nations also tend to follow this trend making comprehensive effort on anti-virus software development. For our country, we are facing with the challenge to develop this "strategic technology". Creating anti-virus software framework and resources in next few years is one of the national security-wide concerns. The detection of malware is the most significant part of malware protection. In this paper, we provide an approach for malicious software detection and performs some experimental investigation on malware detection using Naive bayes algorithm. The goal of this work is to increase the malware detection rates using nave bayes algorithm. With the recent relevance of online platforms capable of executing increasingly complex software and the rising ubiquity of using online platforms in sensitive webpages such as net banking, online shopping etc. there is a rising danger associated with malware targeted at our devices. The problem of detecting such malware presents unique challenges due to the limited resources available and limited privileges granted to the user, but also presents unique opportunity in the required metadata attached to each application. Our system extracts a number of features and trains using Naive Bayes Algorithm.

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LIST OF ABBREVIATIONS

SL NO.	ABBREVIATIONS	EXPANSION
1	AV	Anti Virus scanning
2	PC	Personal Computer
3	URL	Uniform Resource Locator
4	AV-TEST	Anti Virus Test
5	SQL	Structured Query Language
6	IDA	Interactive disassembler
7	MD5	Message Digest Algorithm
8	VM	Virtual machine
9	ML	Machine Learning
10	AI	Artificial Intelligence
11	SVM	Support Vector Machine
12	ID	Identity
13	CFS	Correlation feature selection
14	ML.PREDICT	Machine Learning Predict
15	ACC	Accuracy
16	TP	True Positive
17	FP	False Positive
18	TN	True Negative
19	FN	False Negative
20	PPV	Precision
21	TPR	True Positive Rate
22	FPR	False Positive Rate

CHAPTER 1

INTRODUCTION

Detecting malware on a system can be difficult, and detecting potential malware within an acquired image is even more so. However, this is something analysts in law enforcement, as well as in the public and private sectors have to deal with, and as such, need the knowledge, skills, and process in order to accomplish this task. Antivirus scanning applications may prove insufficient for this task, and analysts may have to look for artifacts of a malware infection, rather than the malware itself, in order to locate the malware. As such, it is important for analysts to understand the characteristics of malware in order to understand the types of malware artifacts that may be present on a system, as well as where and how to locate those potential. Analysts should always document their activities, and developing a checklist of malware detection techniques can be very valuable, particularly when the analyst fills that checklist in with the results of each technique, or a statement or justification for not using the technique.

We spend every day online conducting business, browsing Facebook, searching for new information. It's become so common place that we often forget just how dangerous the internet can be for users. While there are countless legitimate websites out there with effective Cyber security measures in place, there are also many malicious websites that are created solely to cause harm. Hackers are working 24 hours a day to try to exploit vulnerabilities or dupe users into giving them access to their personal information—and it's shockingly effective. Sure, there are best practices that everyone can and should follow to avoid this situation, including not clicking on unfamiliar links or downloading anything from someone you don't trust. But hackers are far more sophisticated now than they were in the year 2000. They can infect your computer without you even clicking on anything.

We visit various websites daily and it is important to know which sites are secure. A malicious website is a site created to steal data from users. These dangerous sites typically resemble legitimate websites, and your computer can be attacked by simply visiting a malicious website. You may be prompted to download software that your computer appears to need. A hazardous installation can compromise your machine, and your sensitive information as well. Here are a few things that can happen when you unknowingly visit a malicious website.

A drive-by-download can do all the damage that an untrusted download can do, with one important detail: it doesn't wait for your permission. When you click on an untrusted download, you are giving explicit permission for the program to install itself on your machine. But drive-by-downloads bypass all of that and install themselves onto your computer without asking for your permission. Hackers can install software onto sites that watch for vulnerabilities and pounce on them as soon as possible – leading to drive-by-downloads to your PC.

JavaScript infections sound technical, so let's break it down briefly. JavaScript is the language in which a lot of the internet is written. Many web applications, like Google Docs, use JavaScript to run their site. But if there are bugs or vulnerabilities in that code, hackers jump on it. JavaScript malware will install itself onto your computer and then run malicious code on your machine. It could scrape sensitive information or even redirect your computer to even more malicious sites, creating a chain reaction that could impact your life.

Another widespread phenomenon is malvertising, which is a form of hacking where an ad – one of any of the billions of ads that are online today – is hijacked. The hacker then uses that ad's network to spread it even farther. You don't notice that this one particular ad is hijacked, and you might click on it. Before you know it, you've installed malicious software on your computer and spread it to others.

URL injections are simple but effective. Targeting a platform like Word press (which powers 60% of today's blogs), hackers embed malicious URLs into a web page – sometimes even taking over entire pages. Once you visit a page like this from your web browser, code is executed on your PC that redirects you to other malicious sites, downloads malware to your computer, or scrapes personal information from you. This is also done with malicious redirects and browser hijackers, both of which will force you to visit other malware-infected sites.

It doesn't stop there: phishing websites often set themselves up to appear like credible sites, such as Amazon or eBay, where you would normally enter your credit card information. It's another powerfully convincing way to get you to share your data.

1.1 MALWARE

Malware is malicious software's, such as viruses, ransomware and spyware. Typically consists of code developed by cyberattacks, designed to cause extensive damage to data and systems or to gain unauthorized access to a network & delivered in the form of a link or file over email and requires the user to click on the link or open the file to execute the malware.

Malware has actually been a threat to individuals and organizations since the early 1970s when the Creeper virus first appeared. Malware delivers its payload in a number of different ways. From demanding a ransom to stealing sensitive personal data, cyber criminals are becoming more and more sophisticated in their methods.

Malware, short for malicious software, is a blanket term for viruses, worms, trojans and other harmful computer programs hackers use to wreak destruction and gain access to sensitive information. In other words, software is identified as malware based on its intended use, rather than a particular technique or technology used to build it.

1.1.1 Types of Malwares:

There are a number of different ways of categorizing malware; the first is by how the malicious software spreads. You've probably heard the words virus, trojan, and worm used interchangeably, but they describe three subtly different ways malware can infect target computers:

- a) **Worms** - Worms get their name from the way they infect systems. Starting from one infected machine, they weave their way through the network, connecting to consecutive machines in order to continue the spread of infection. This type of malware can infect entire networks of devices very quickly. A worm is a standalone piece of malicious software that reproduces itself and spreads from computer to computer.
- b) **Virus** - Possibly the most common type of malware, viruses attach their malicious code to clean code and wait for an unsuspecting user or an automated process to execute them. Like a

biological virus, they can spread quickly and widely, causing damage to the core functionality of systems, corrupting files and locking users out of their computers. They are usually contained within an executable file. A virus is a piece of computer code that inserts itself within the code of another standalone program, then forces that program to take malicious action and spread itself.

- c) **Trojans** - Just like Greek soldiers hid in a giant horse to deliver their attack, this type of malware hides within or disguises itself as legitimate software. Acting discreetly, it will breach security by creating backdoors that give other malware variants easy access. A trojan is a program that cannot reproduce itself but masquerades as something the user wants and tricks them into activating it so it can do its damage and spread.

Malware can also be installed on a computer "manually" by the attackers themselves, either by gaining physical access to the computer or using privilege escalation to gain remote administrator access.

Another way to categorize malware is by what it does once it has successfully infected its victim's computers. There are a wide range of potential attack techniques used by malware:

- i) **Spyware** is defined as "malware used for the purpose of secretly gathering data on an unsuspecting user." In essence, it spies on your behavior as you use your computer, and on the data you send and receive, usually with the purpose of sending that information to a third party. A keylogger is a specific kind of spyware that records all the keystrokes a user makes—great for stealing passwords. Spyware, as its name suggests, is designed to spy on what a user is doing. Hiding in the background on a computer, this type of malware will collect information without the user knowing, such as credit card details, passwords and other sensitive information.
- ii) A **rootkit** is, as described as "a program or, more often, a collection of software tools that gives a threat actor remote access to and control over a computer or other system." It gets its name because it's a kit of tools that (generally illicitly) gain root access (administrator-level control, in Unix terms) over the target system, and use that power to hide their presence.
- iii) **Adware** is malware that forces your browser to redirect to web advertisements, which often themselves seek to download further, even more malicious software. As The New York Times notes, adware often piggybacks onto tempting "free" programs like games or browser extensions.
- iv) **Ransomware** is a flavor of malware that encrypts your hard drive's files and demands a payment, usually in Bitcoin, in exchange for the decryption key. Several high-profile malware outbreaks of the last few years, such as Petya, are ransomware. Without the decryption key, it's mathematically impossible for victims to regain access to their files. So-called scareware is a sort of shadow version of ransomware; it claims to have taken control of your computer and demands a ransom, but actually is just using tricks like browser redirect loops to make it seem as if it's done more damage than it really has, and unlike ransomware can be relatively easily disabled. Also known as scareware, ransomware comes with a heavy price. Able to lockdown networks and lock out users until a ransom is paid, ransomware has targeted some of the biggest organizations in the world today with expensive results.

v) **Cryptojacking** is another way attackers can force you to supply them with Bitcoin—only it works without you necessarily knowing. The crypto mining malware infects your computer and uses your CPU cycles to mine Bitcoin for your attacker's profit. The mining software may run in the background on your operating system or even as JavaScript in a browser window.

vi) **Malvertising** is the use of legitimate ads or ad networks to covertly deliver malware to unsuspecting user's computers. For example, a cybercriminal might pay to place an ad on a legitimate website. When a user clicks on the ad, code in the ad either redirects them to a malicious website or installs malware on their computer. In some cases, the malware embedded in an ad might execute automatically without any action from the user, a technique referred to as a drive-by download.

1.1.2. How to prevent malware

With spam and phishing email being the primary vector by which malware infects computers, the best way to prevent malware is make sure your email systems are locked down tight—and your users know how to spot danger. We recommend a combination of carefully checking attached documents and restricting potentially dangerous user behavior—as well as just familiarizing your users with common phishing scams so that their common sense can kick in.

When it comes to more technical preventative measures, there are a number of steps to take, including keeping all your systems patched and updated, keeping an inventory of hardware so you know what you need to protect, and performing continuous vulnerability assessments on your infrastructure. When it comes to ransomware attacks in particular, one way to be prepared is to always make backups of your files, ensuring that you'll never need to pay a ransom to get them back if your hard drive is encrypted.

1.1.3 Malware protection

Antivirus software is the most widely known product in the category of malware protection products; despite "virus" being in the name, most offerings take on all forms of malware. While high-end security pros dismiss it as obsolete, it's still the backbone of basic antimalware defense. Today's best antivirus software is from vendors Kaspersky Lab, Symantec and Trend Micro, according to recent tests by AV-TEST.

When it comes to more advanced corporate networks, endpoint security offerings provide defense in depth against malware. They provide not only the signature-based malware detection that you expect from antivirus, but anti-spyware, personal firewall, application control and other styles of host intrusion prevention.

1.1.4 Malware examples

There is a long, storied history of malware, dating back to infected floppy disks swapped by Apple II hobbyists in the 1980s and the Morris Worm spreading across Unix machines in 1988. Some of the other high-profile malware attacks have included:

- i) **ILOVEYOU**, a worm that spread like wildfire in 2000 and did more than \$15 billion in damage.

- ii) **SQL Slammer**, which ground internet traffic to a halt within minutes of its first rapid spread in 2003.
- iii) **Conficker**, a worm that exploited unpatched flaws in Windows and leveraged a variety of attack vectors – from injecting malicious code to phishing emails – to ultimately crack passwords and hijack Windows devices into a botnet.
- iv) **Zeus**, a late '00s keylogger Trojan that targeted banking information
- v) **CryptoLocker**, the first widespread ransomware attack, whose code keeps getting repurposed in similar malware projects.
- vi) **Stuxnet**, an extremely sophisticated worm that infected computers worldwide but only did real damage in one place: the Iranian nuclear facility at Natanz, where it destroyed uranium enrichment centrifuges, the mission it was built for by U.S. and Israeli intelligence agencies.

1.2 MALWARE DETECTION METHOD

Malware analysis is a process or technique of determining the origin and potential impact of a specified malware sample. Malware could be anything that looks malicious or acts like one like a virus, worm, bug, Trojan, spyware, adware, etc. Any suspicious software that may cause harm to your system can be considered as a malware. Regardless of the increasing use of anti-malware software programs, the world is witnessing a rapid evolution in malware attacks. Anything that is connected to the Internet is prone to malware attack.

Malware detection continues to pose challenge as potential attackers find new and advanced ways to escape from detection methods. This is where malware analysis comes to the picture. Malware analysis gives a better understanding of how a malware functions and what can be done to eliminate those threats. The malware analysis can be done with different objectives in mind like to understand the extent of malware infection, to know the repercussions of the malware attack, to identify the nature of the malware, and to determine the functionalities of the malware.

i. Static Analysis:

Static analysis is a process of analyzing a malware binary without actually running the code. Static analysis is generally performed by determining the signature of the binary file which is a unique identification for the binary file and can be done by calculating the cryptographic hash of the file and understanding each component. The malware binary file can be reverse-engineered by loading the executable into a disassembler such as IDA. The machine-executable code can be converted assembly language code so that it can be easily read and understood by humans. The analyst then looks at the program to have a better understanding of what it is capable of and what it's programmed to do.

Static analysis examines a malware file without actually running the program. This is the safest way to analyze malware, as executing the code could infect your system. In its most basic form, static analysis gleans information from malware without even viewing the code. Metadata such as file name, type, and size can yield clues about the nature of the malware. MD5 checksums or hashes can be compared with a database to determine if the malware has been previously recognized. And scanning with antivirus software can reveal what malware you're dealing with. Advanced static analysis—also known as code analysis—dissects the binary file to study each component, still without executing it. One

method is to reverse engineer the code using a disassembler. Machine code is translated into assembly code, which is readable and understandable. By looking at the assembly instructions, an analyst can tell what the program is meant to do. A file's headers, functions, and strings can provide important details. Unfortunately, modern hackers are adept at evading this technique. By embedding certain syntax errors into their code, they can misdirect disassemblers and ensure the malicious code still runs. Because static malware analysis can be more easily foiled, dynamic malware analysis is also necessary.

ii. Dynamic Analysis:

The dynamic analysis approach involves the execution of the application on either a virtual machine or a physical device. During the analysis, the behavior of the application is observed and can be analyzed. The dynamic analysis results in a less abstract view of the application than the static analysis. The code paths executed during runtime are a subset of all available paths. The main goal for analysis frameworks is to reach high code coverage because all possible actions should be triggered to observe any possible malicious behavior. Research has shown that fully randomized input achieves a 40% or lower code coverage. Multipath execution is a way to increase the code coverage. Whenever a branch is taken, the current state of the VM is saved in a snapshot so that it can be rolled back and executes the other branch. However, this is only partially applicable because this behavior much likely breaks network protocols.

Depending on the data of interest, different techniques exist to monitor the applications behavior. One analysis technique is taint tracking. A system, wide implemented taint propagation is able to analyze the message flow and potential misuse of private sensitive information through third party applications. A popular framework which uses that technique is TaintDroid. Developed with the Dalvik Virtual Machine, it monitors how applications access and manipulate user data in real time. It labels the sensitive data as it flows through variables, files and messages. However, TaintDroid is only able to detect explicit data flow and is not able to analyze implicit flow through control flow. Private information could be transmitted over that channel.

1.3 MALWARE INFECTION METHODS

There are several methods that the Android devices could be infected with malware. The following are *four* different methods which malware can be installed on the phone.

a) Repackaging legitimate application

This is one of the most common methods used by the attackers. They may locate and download legitimate popular applications from the market, disassemble it, add malicious code and then reassemble and submit the new apps to the official or alternative Android market. Users could be vulnerable by being enticed to download and install these infected applications. It was found that 86.0% repackaged legitimate applications including malicious payloads after analyzing more than 1,200 Android malware samples.

b) Exploiting Android's application bug

There could be a bug in the application itself. The attacker may use this vulnerability to compromise the phone and install the malware on the device.

c) Fake applications

It was also discovered that there are fake applications created to include malware which allows attackers to access your mobile device. Attackers upload on the market fake applications that seem legitimate to users but they are malware by themselves. For example, Spyeeye's fake security tool was found in the market which is a malware.

d) Remote Install

The malware could be installed in the user phone remotely. If the attacker could compromise user's credentials and pass them in the market, then in this case, the malware will be installed into the device without the user's knowledge. This application will contain malicious codes that allow attackers to access personal data such as contacts.

1.4 MACHINE LEARNING

Machine learning (ML) is a type of artificial intelligence (AI) that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data as input to predict new output values.

Machine Learning is the field of study that gives computers the capability to learn without being explicitly programmed. ML is one of the most exciting technologies that one would have ever come across. As it is evident from the name, it gives the computer that makes it more similar to humans: The ability to learn. Machine learning is actively being used today, perhaps in many more places than one would expect. Machine Learning (ML) can be explained as automating and improving the learning process of computers based on their experiences without being actually programmed i.e, without any human assistance.

The process starts with feeding good quality data and then training our machines (computers) by building machine learning models using the data and different algorithms. The choice of algorithms depends on what type of data we have and what kind of task we are trying to automate. Machine learning is a part of artificial intelligence which is described as the science to getting computers to do things without being directly programmed.

Machine learning focuses on the study of computing algorithms and data into the system to allow it to make decisions without writing manual code. Machine learning is revolutionizing the way we do business and our day-to-day activities. The old or traditional software programmers were loaded with a lot of work. They first wrote logic based on the current state of the business and then added relevant data. But, with time, and with the advent of technology, major changes started happening.

1.4.1 Basic Difference in ML and Traditional Programming

- Traditional Programming: We feed in DATA (Input) + PROGRAM (logic), run it on machine and get output.

- Machine Learning: We feed in DATA(Input) + Output, run it on machine during training and the machine creates its own program(logic), which can be evaluated while testing.

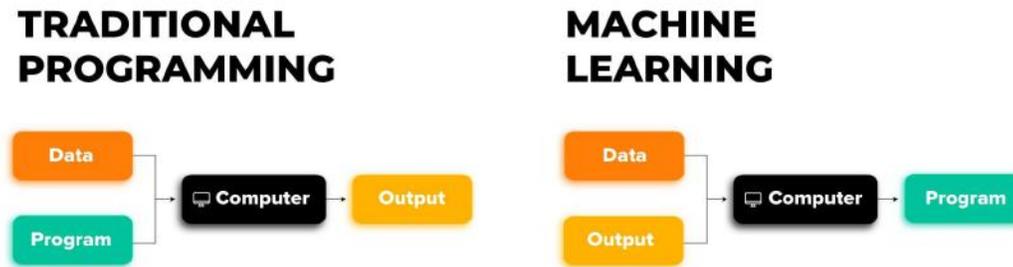


Fig 1.1 Difference between traditional programming and machine learning

1.4.2 Applications of machine learning

Sample applications of machine learning:

- Web search
- Computational biology
- Finance
- E-commerce
- Space exploration
- Robotics
- Information extraction
- Social networks
- Debugging

1.4.3 Key Elements of Machine Learning

Every machine learning algorithm has three components:

- **Representation:** how to represent knowledge. Examples include decision trees, sets of rules, instances, graphical models, neural networks, support vector machines, model ensembles and others.

- **Evaluation:** the way to evaluate candidate programs (hypotheses). Examples include accuracy, precision and recall, squared error, likelihood, posterior probability, cost, margin, entropy k-L divergence and others.
- **Optimization:** the way candidate programs are generated is known as the search process. For example, combinatorial optimization, convex optimization, constrained optimization.

1.4.4 Types of machine learning

There are four types of machine learning:

i) Supervised learning:- It is also called inductive learning. Training data includes desired outputs. This is spam this is not, learning is supervised.

ii) Unsupervised learning:- Training data does not include desired outputs. Example is clustering. It is hard to tell what is good learning and what is not.

iii) Semi-supervised learning: Training data includes a few desired outputs.

iv) Reinforcement learning: Rewards from a sequence of actions. AI types like it, it is the most ambitious type of learning.

Supervised learning is the most mature, the most studied and the type of learning used by most machine learning algorithms. Learning with supervision is much easier than learning without supervision.

Inductive Learning is where we are given examples of a function in the form of data (x) and the output of the function ($f(x)$). The goal of inductive learning is to learn the function for new data (x).

- **Classification:** when the function being learned is discrete.
- **Regression:** when the function being learned is continuous.
- **Probability Estimation:** when the output of the function is a probability.

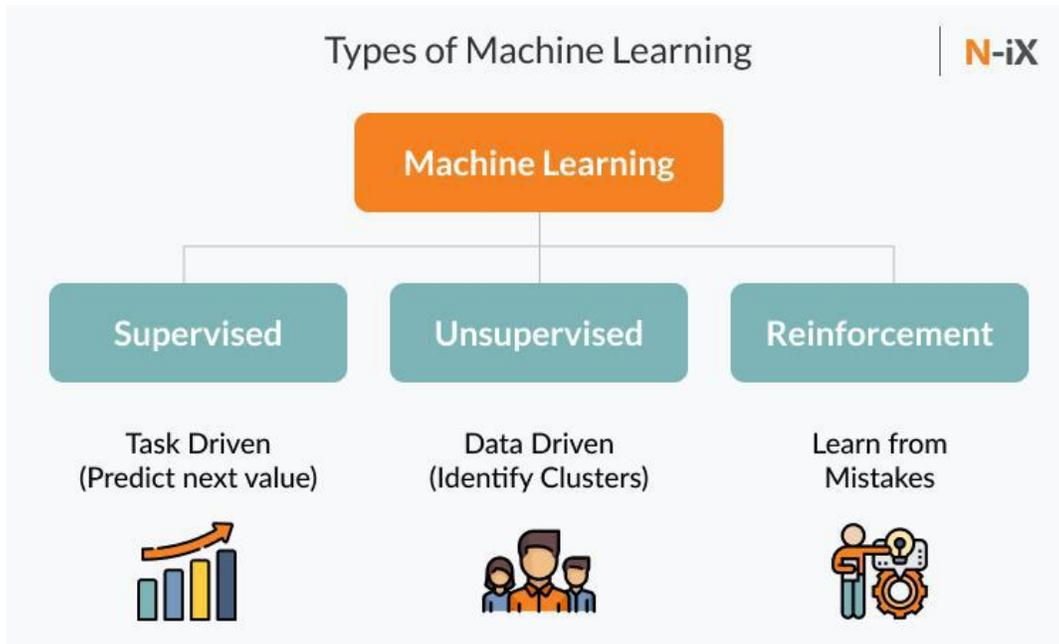


Fig 1.2 Types of machine learning

1.5 SVM Algorithm

Support Vector Machine or SVM is one of the most popular Supervised Learning algorithms, which is used for Classification as well as Regression problems. However, primarily, it is used for Classification problems in Machine Learning. The goal of the SVM algorithm is to create the best line or decision boundary that can segregate n-dimensional space into classes so that we can easily put the new data point in the correct category in the future. This best decision boundary is called a hyperplane. SVM chooses the extreme points/vectors that help in creating the hyperplane. These extreme cases are called as support vectors, and hence algorithm is termed as Support Vector Machine

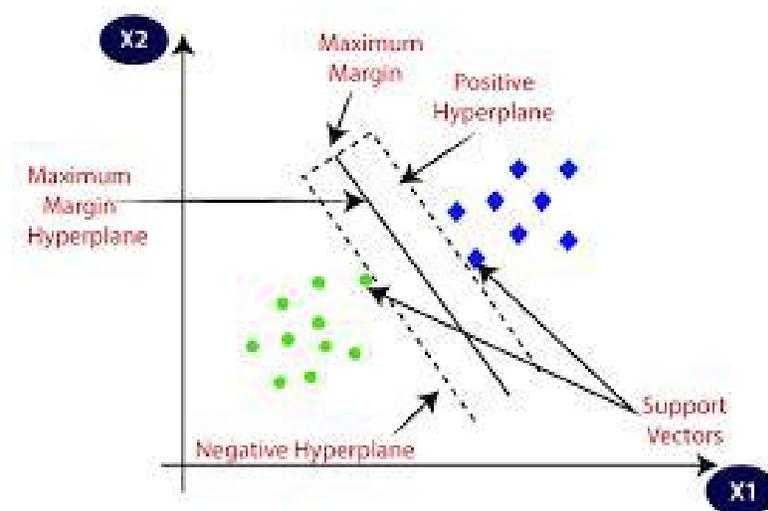


Fig 1.3 SVM algorithm

1.5.1 Types of SVM

SVM can be of two types:

- **Linear SVM:** Linear SVM is used for linearly separable data, which means if a dataset can be classified into two classes by using a single straight line, then such data is termed as linearly separable data, and classifier is used called as Linear SVM classifier.
- **Non-linear SVM:** Non-Linear SVM is used for non-linearly separated data, which means if a dataset cannot be classified by using a straight line, then such data is termed as non-linear data and classifier used is called as Non-linear SVM classifier.

1.5.2 Advantages of SVM algorithm

- SVM works relatively well when there is a clear margin of separation between classes.
- SVM is more effective in high dimensional spaces.
- SVM is effective in cases where the number of dimensions is greater than the number of samples.
- SVM is relatively memory efficient.

1.5.3 Disadvantages of SVM algorithm

- SVM algorithm is **not suitable for large data sets**.
- SVM does not perform very well when the data set has more noise i.e. target classes are overlapping.
- In cases where the number of features for each data point exceeds the number of training data samples, the SVM will underperform.

1.6 Naïve Bayes Classifier Algorithm

Naïve Bayes algorithm is a supervised learning algorithm, which is based on Bayes theorem and used for solving classification problems. It is mainly used in text classification that includes a high-dimensional training dataset. Naïve Bayes Classifier is one of the simple and most effective Classification algorithms which helps in building the fast machine learning models that can make quick predictions. It is a probabilistic classifier, which means it predicts on the basis of the probability of an object. Some popular examples of Naïve Bayes Algorithm are spam filtration, Sentimental analysis, and classifying articles.

It is a classification technique based on Bayes' Theorem with an assumption of independence among predictors. In simple terms, a Naive Bayes classifier assumes that the presence of a particular feature in a class is unrelated to the presence of any other feature.

For example, a fruit may be considered to be an apple if it is red, round, and about 3 inches in diameter. Even if these features depend on each other or upon the existence of the other features, all of these properties independently contribute to the probability that this fruit is an apple and that is why it is known as 'Naive'.

Naive Bayes model is easy to build and particularly useful for very large data sets. Along with simplicity, Naive Bayes is known to outperform even highly sophisticated classification methods.

Bayes theorem provides a way of calculating posterior probability $P(c|x)$ from $P(c)$, $P(x)$ and $P(x|c)$.

$$P(c|x) = \frac{P(x|c)P(c)}{P(x)}$$

Likelihood
Class Prior Probability
Posterior Probability
Predictor Prior Probability

$$P(c | X) = P(x_1 | c) \times P(x_2 | c) \times \dots \times P(x_n | c) \times P(c)$$

Where,

- $P(c|x)$ is the posterior probability of *class* (c , *target*) given *predictor* (x , *attributes*).
- $P(c)$ is the prior probability of *class*.
- $P(x|c)$ is the likelihood which is the probability of *predictor* given *class*.
- $P(x)$ is the prior probability of *predictor*.

1.6.1 Advantages of Naive Bayes

- It is easy and fast to predict class of test data set. It also performs well in multi class prediction.
- When assumption of independence holds, a Naive Bayes classifier performs better compare to other models like logistic regression and you need less training data.
- It performs well in case of categorical input variables compared to numerical variable(s). For numerical variable, normal distribution is assumed (bell curve, which is a strong assumption).

1.6.2 Disadvantages of Naive Bayes

- It is easy and fast to predict class of test data set. It also performs well in multi class prediction.
- When assumption of independence holds, a Naive Bayes classifier performs better compare to other models like logistic regression and you need less training data.
- It performs well in case of categorical input variables compared to numerical variable(s). For numerical variable, normal distribution is assumed (bell curve, which is a strong assumption).

1.6.3 Applications of Naive Bayes Algorithms

- **Real time Prediction:** Naive Bayes is an eager learning classifier and it is sure fast. Thus, it could be used for making predictions in real time.

- **Multi class Prediction:** This algorithm is also well known for multi class prediction feature. Here we can predict the probability of multiple classes of target variable.
- **Text classification/ Spam Filtering/ Sentiment Analysis:** Naive Bayes classifiers mostly used in text classification (due to better result in multi class problems and independence rule) have higher success rate as compared to other algorithms. As a result, it is widely used in Spam filtering (identify spam e-mail) and Sentiment Analysis (in social media analysis, to identify positive and negative customer sentiments).
- **Recommendation System:** Naive Bayes Classifier and Collaborative Filtering together builds a Recommendation System that uses machine learning and data mining techniques to filter unseen information and predict whether a user would like a given resource or not

1.7 Random Forest

The idea behind the random forest algorithm is to construct a forest of random trees. It is an ensemble learning method for classification. It works by building a decision tree at training time and outputting the class by individual trees. The training algorithm for random forests uses the general technique of bootstrap aggregating, or bagging, to the learners. The advantages of random forest algorithms are its efficiency on large databases, successfully handling thousands of input variables without deleting any variable. Moreover, it has an effective method for estimating missing data and maintains accuracy when a large proportion of the data are missing. Random forest algorithm is selected in the analysis of permission-based malware detection as a third decision tree algorithm.

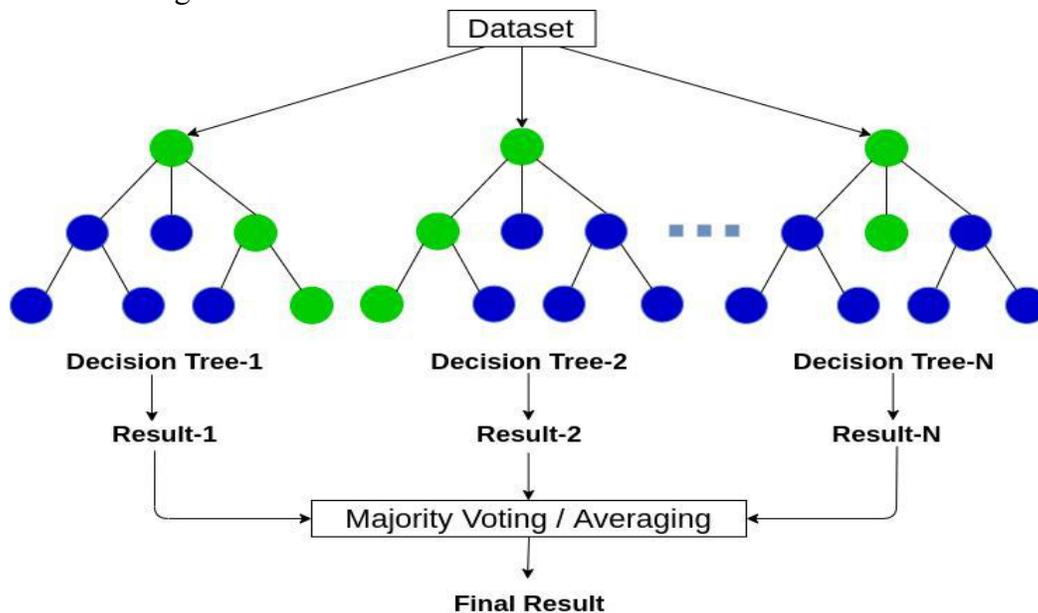


Fig 1.4 Random forest algorithm

1.7.1 Advantages of random forest algorithm

- Random Forest is based on the bagging algorithm and uses Ensemble Learning technique. It creates as many trees on the subset of the data and combines the output of all the trees. In this way it reduces overfitting problem in decision trees and also reduces the variance and therefore improves the accuracy.
- Random Forest can be used to solve both classification as well as regression problems.
- Random Forest works well with both categorical and continuous variables.
- Random Forest can automatically handle missing values.
- No feature scaling required: No feature scaling (standardization and normalization) required in case of Random Forest as it uses rule based approach instead of distance calculation.
- Handles non-linear parameters efficiently: Non linear parameters don't affect the performance of a Random Forest unlike curve based algorithms. So, if there is high non-linearity between the independent variables, Random Forest may outperform as compared to other curve based algorithms.
- Random Forest can automatically handle missing values.
- Random Forest is usually robust to outliers and can handle them automatically.
- Random Forest algorithm is very stable. Even if a new data point is introduced in the dataset, the overall algorithm is not affected much since the new data may impact one tree, but it is very hard for it to impact all the trees.
- Random Forest is comparatively less impacted by noise.

1.7.2 Disadvantages of random forest algorithm

- **Complexity:** Random Forest creates a lot of trees (unlike only one tree in case of decision tree) and combines their outputs. By default, it creates 100 trees in Python sklearn library. To do so, this algorithm requires much more computational power and resources. On the other hand decision tree is simple and does not require so much computational resources.
- **Longer Training Period:** Random Forest require much more time to train as compared to decision trees as it generates a lot of trees (instead of one tree in case of decision tree) and makes decision on the majority of votes.

CHAPTER-2

LITERATURE SURVEY

Malware is a worldwide epidemic. Studies suggest that the impact of malware is getting worse. Malware detectors are the primary tools in defence against malware. The quality of such a detector is determined by the techniques it uses. It is therefore imperative that we study malware detection techniques and understand their strengths and limitations. In this paper, we provide a "data mining" approach for malicious software detection and perform some experimental investigation on malware detection using linear SVM algorithm. The goal of the work [1] is to show actual results of malware detection rates of SVM method. The SVM classifier is approved to detect unknown samples of malware with a probability of 74 - 83 percent.

Text classification algorithms, such SVM, and Naïve Bayes, have been developed to build up search engines and construct spam email filters [2]. As a simple yet powerful sample of Bayesian Theorem, Naïve Bayes shows advantages in text classification yielding satisfactory results. Malware, short for Malicious Software, is growing continuously in numbers and sophistication as our digital presence continues to grow. It is a very serious problem and many efforts are devoted to malware detection in today's cybersecurity world. Many machine learning algorithms have been used in automatic detection of malware problems in recent years. Recently Deep Learning is being used with better performance. Deep Learning models work much better in the analysis of long sequences of system calls.

Every time a web search engine like Google is used to search the internet, one of the reasons that works so well is because of a learning algorithm that has learned how to rank web pages. These algorithms are used for various purposes like data mining, image processing, predictive analytics, etc. to name a few. The main advantage of using machine learning is that, once an algorithm learns what to do with data, it can do its work automatically. In the paper [3], a brief review and future prospect of the vast applications of machine learning algorithms has been made.

To defeat current commercial antivirus software, the virus developers are employing obfuscation techniques to create mutating viruses. The current antivirus software cannot handle the obfuscated viruses well since its detection methods that are based upon static signatures are not resilient to even slight variations in the code that forms the virus. In [4], a new type of virus signature, called dynamic signature, and an algorithm for matching dynamic signatures was proposed. A dynamic signature is created based on the runtime behaviour of a virus. Therefore, an obfuscated virus can also be detected using a dynamic signature as long as it dynamically behaves like the original virus. Issues related to deploying the virus detection approach was also discussed. The proposed method is effective in identifying obfuscated viruses.

Conventional signature matching-based antivirus systems fail to detect polymorphic, obfuscated, and new, previously unseen malicious executables. Hence, automated behaviour-based malware detection using machine learning techniques is considered a profound solution. The behaviour of each malware on an emulated (sandbox) environment will be automatically analysed and will generate behaviour reports. These reports will be pre-processed into sparse vector models for further machine learning (classification). The classifiers used in this research are k-Nearest Neighbors (kNN), Naïve Bayes, Decision Tree, Support Vector Machine (SVM), and Artificial Neural Network (ANN). According to the analysis of the test and experiment results of all the 5 classifiers, the overall best performance goes to J48 with a recall (true positive rate) of 95.9%, a false positive rate of 2.4%, a precision (positive predictive value) of 97.3%, and an accuracy of 96.8%. It can be concluded that a proof-of-concept based on automatic behaviour-based

malware analysis and the use of machine learning techniques could detect malware quite effectively and efficiently[5].

With an increase in popularity and usage of smartphones, attackers are constantly trying to get sensitive information from smartphones. To protect the information, researchers are constantly working on the effective detection of android malware. Since there has been a large-scale increase in the number of new malwares being detected, machine learning-based techniques have to turn towards effective large-scale detection [6].

Machine-learning algorithm detects and validates the principles that support the information. With this information, the algorithm can 'consult' the properties of previously unrecognised samples. At the detection of malware, a previously unrecognised sample may be a new file to the program. Its subtle assets can be malware or benign. The set of customised terms in terms of data is called a model. Machine learning has many broad approaches that are needed in solving one approach. These methods have different capabilities and different appropriate functions. In [6], have used advanced machine learning algorithms and use the most accurate algorithm in the proposed model to detect if a file is malware or not.

With the recent emergence of mobile platforms capable of executing increasingly complex software and the rising ubiquity of using mobile platforms in sensitive applications such as banking, there is a rising danger associated with malware targeted at mobile devices. The problem of detecting such malware presents unique challenges due to the limited resources available and limited privileges granted to the user, but also presents a unique opportunity in the required metadata attached to each application. In [7], a machine learning-based system for the detection of malware on Android devices. The proposed system extracts a number of features and trains a One-Class Support Vector Machine in an offline (off-device) manner, in order to leverage the higher computing power of a server or cluster of servers.

CHAPTER-3

EXISTING SYSTEM

3.1 Overview

The governments of developed countries already have the policy framework of national anti-virus software addressing the security issues and developing nations also tend to follow this trend - making comprehensive effort on anti-virus software development.

The spread of malware is being epidemic as a consequence of rapid growth of computer technology and its usage. Malware is defined as any code designed to infiltrate or damage a computer system without owner's consent. The term malware is brief of the word "malicious software". In recent years, increasing number of malware instances require dramatic improvement on malware detection technology. The malware protection technology is one of the 30 top priority topics of the world information and communication technology development trends since 2003. For our country, we are facing with the challenge to develop this "strategic technology" and create anti-virus software framework and resources in a next few year, which is one of the national security wide concerns. The detection of malware is the most significant part of malware protection.

They provide a "data mining" approach for malicious software detection and performed some experimental investigation on malware detection using linear SVM algorithm. The goal of this work is to show actual result of malware detection rates of SVM method. The SVM classifier is approved to detect unknown samples of malware with the probability of 74 - 83 percent. The detection principle is that, SVM algorithm generates detection model learning from the sufficient data set of malicious software.

3.2 FLOWCHART

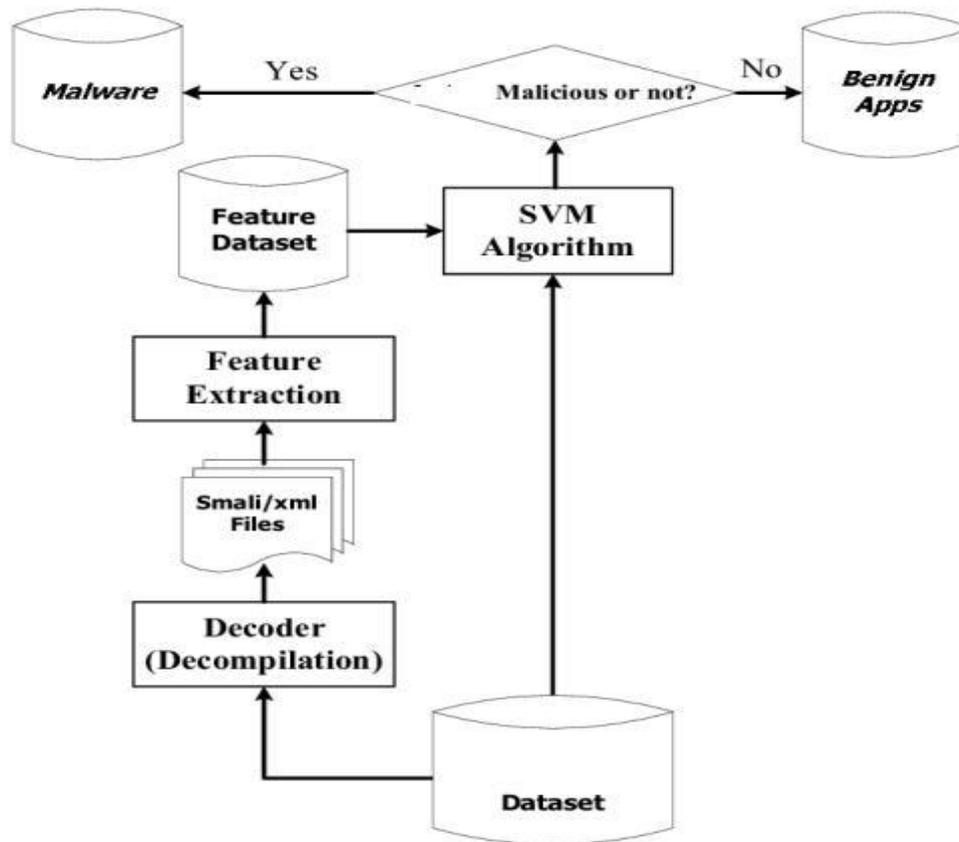


Fig 3.1 Existing system architecture

3.4. DRAWBACK

Although the system works successfully, it has a drawback i.e, The accuracy of existing systems in malware detection is low while looking to the latest highly accurate data mining techniques.

whereas SVM looks at the interactions between them to a certain degree, as long as you're using a non-linear kernel.

And also, when the number of features larger than the number of samples, it is crucial to choose suitable Kernel function and regulation.

CHAPTER-4

PROPOSED SYSTEM

4.1 OVERVIEW

Due to the numerous increases of malware in the networks nowadays, it has become a serious danger that threatens our computers. Network attackers did these attacks by designing the malware. A designed system model is needed to defy these threats, prevent it from multiplying and spreading through the network, and harm our computers. In this paper, we designed a detection system model for this issue. The designed system detects the malware that depends on the information of the dataset, the system will receive the input package and then analyse it, the Naïve Bayesian classification technique will start to work and begin to classify the package, by using the data mining technique, the system worked fast and gained great results in detecting the malware. By applying the Naïve Bayesian classification technique using its probability mathematical equations for both threat data and benign data, the technique will detect the malware and classify data whether it was threat or benign. The results of the experiments were 95% of malware detection accuracy and 98% of detection rate with 21% false positives, which makes it more accurate and effective to detect the malware by using the proposed dataset for this work.

Summarizing our system:

- We describes about the machine learning technique i.e, traning and testing the data set.
- Then we use naïve bayes algorithm for malware detection.
- For classifying the image detected, glm features are used.

4.2 METHOD OF ANALYSIS

We use Machine Learning algorithms for analyzing these permissions. Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns and make decisions with minimal human intervention. Machine-learning algorithms use statistics to find patterns in massive amounts of data. And data, here, encompasses a lot of things—numbers, words, images, clicks, what have you. If it can be digitally stored, it can be fed into a machine learning algorithm.

Machine-learning algorithms are responsible for the vast majority of the artificial intelligence advancements and applications you hear about. A feature vector for each application is created based on a total of 152 permissions which is considered as the feature dataset. The accuracy of detecting the malware samples based on the features extracted is evaluated by applying machine learning classification algorithms like Naive Bayes, Randomforest, etc.

4.3 ARCHITECTURE

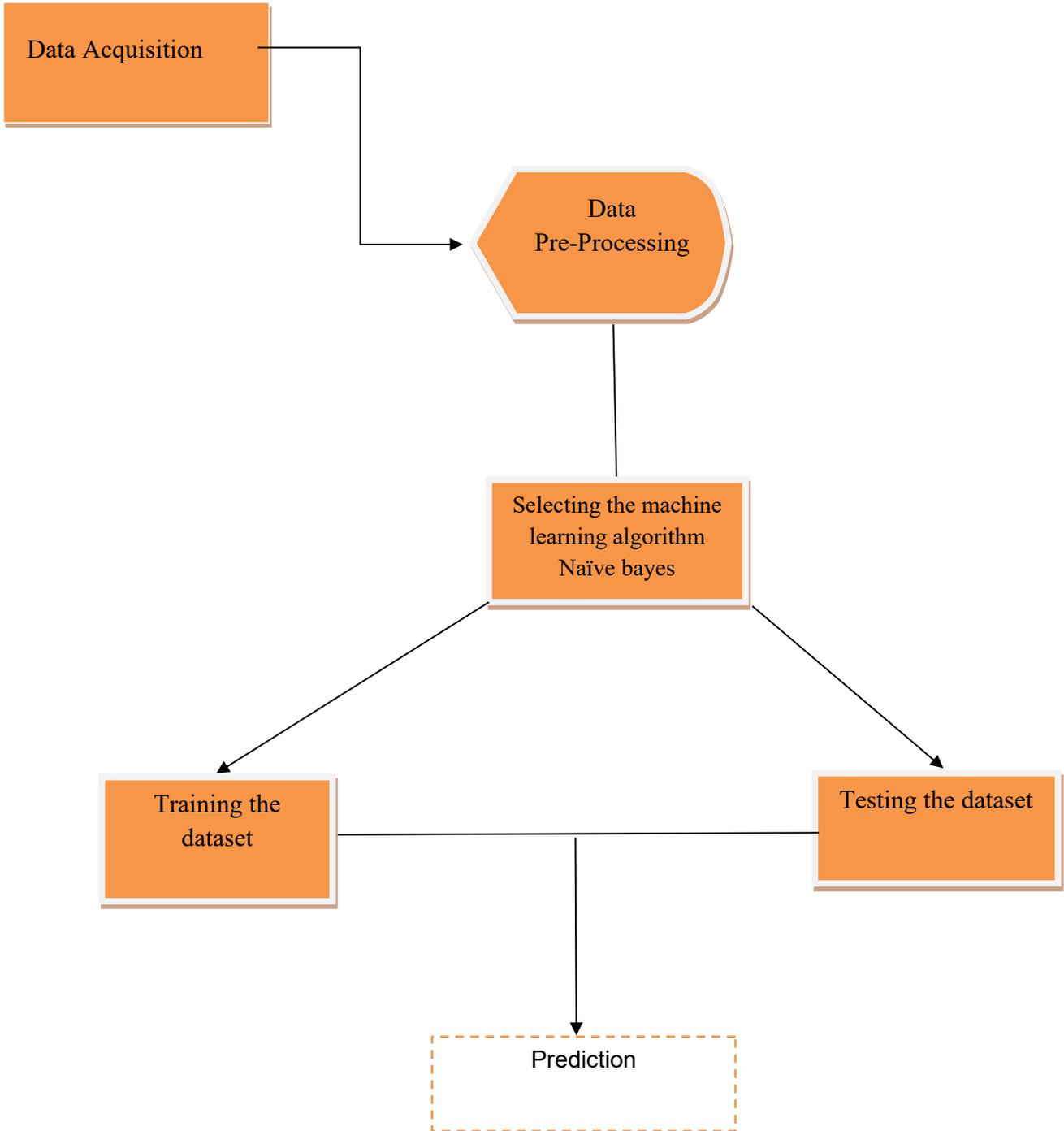


Fig 4.1 Architecture of proposed system

4.4 SYSTEM WORKING

Step 1: First admin needs to login with username and password.

Step 2: Then add the staff details, then admin need to assign work for the staff. Admin can view all the works done by the staff.

Step 3: Staff needs to login with a unique username and password.

Step 4: Staff can upload their work and admin can view it.

Step 5: Staff can upload URL and image to check if it is malicious or not.

Step 6: Staff can upload complaints if any and admin can view the complaint.

CHAPTER-5

SYSTEM REQUIREMENT SPECIFICATIONS

➤ SOFTWARE REQUIREMENTS

- Coding Platform
- Machine Learning Algorithms
- Any Operating System (Windows, Linux, etc...)

➤ HARDWARE REQUIREMENTS

- 8 GB RAM
- Hard disk
- i5 Processor
- Monitor
- Keyboard
- Mouse

CHAPTER-6

SYSTEM DESIGN ARCHITECTURE

Level 0:

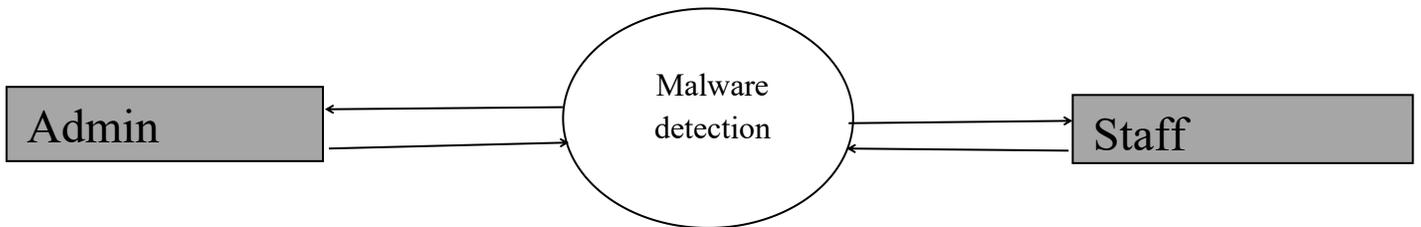
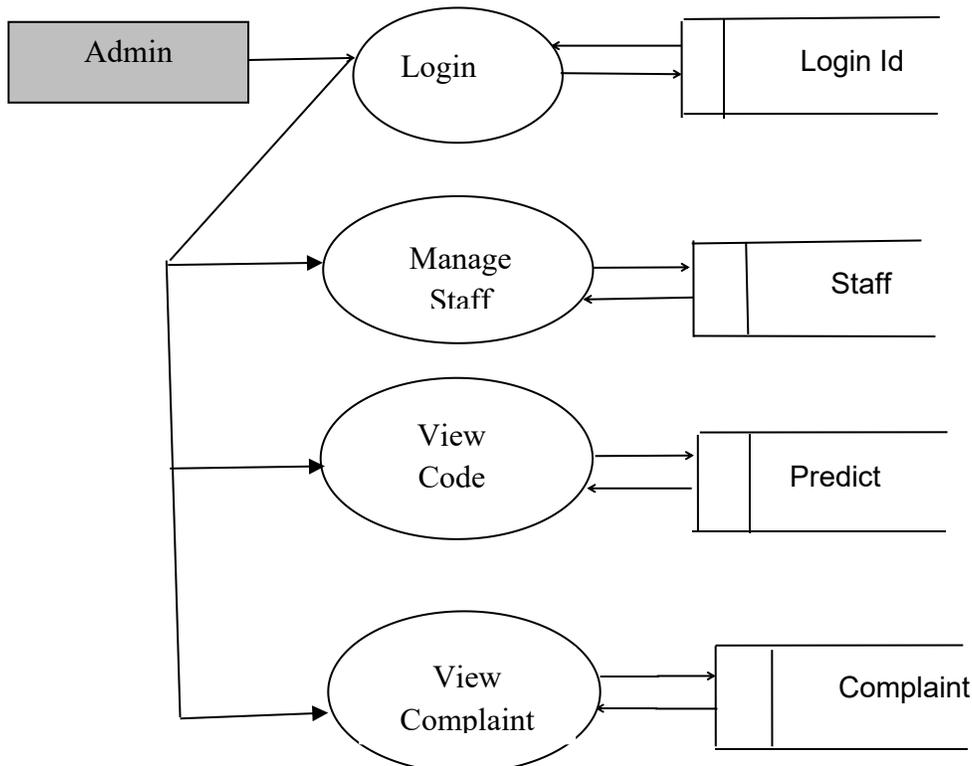


Fig 6.1. Basic abstract of system

Level 0 describes the basic working of our system. The system has two login form that is admin and staff. Here the admin login and add staff to the system. Each staff in will have a login ID and Password and they can Do their work according to the work assigned from the Admin.

Level 1:

Level- 1.1



Level-1.2

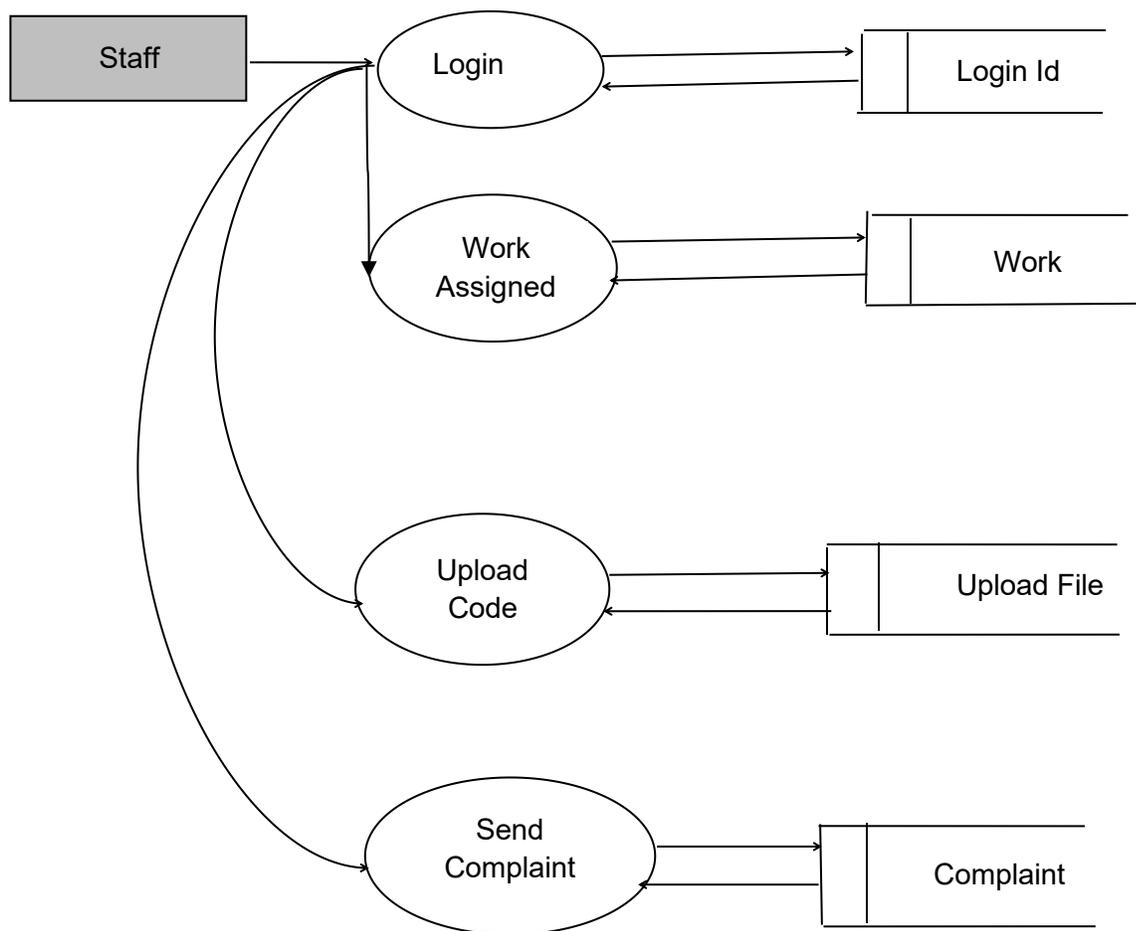


Fig 6.2. Working of System

Level-1.3

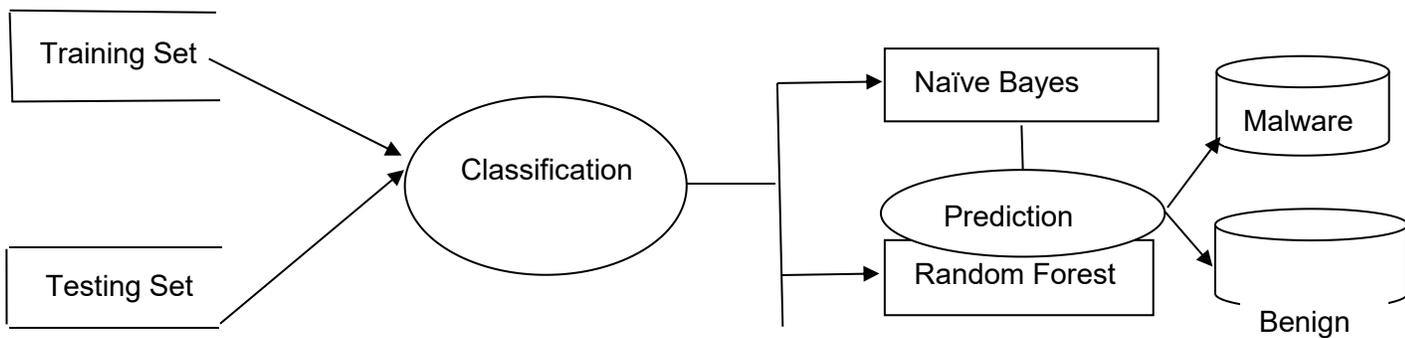


Fig6.3. Extracting the best classifier algorithm via accuracy check

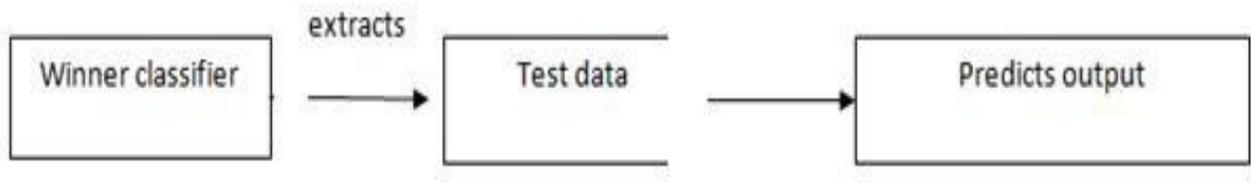


Fig6.4. Output prediction

CHAPTER-7

MODULE DESCRIPTION

The system consists of four modules:

- ❖ **Module 1: Machine Learning**
- ❖ **Module 2: Extraction**
- ❖ **Module 3: Training and Testing**
- ❖ **Module 4: Classification**

MODULE 1: MACHINE LEARNING

Machine learning (ML) is a type of artificial intelligence (AI) that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so. Machine learning algorithms use historical data as input to predict new output values. Machine learning is important because it gives enterprises a view of trends in customer behavior and business operational patterns, as well as supports the development of new products. Many of today's leading companies, such as Facebook, Google and Uber, make machine learning a central part of their operations. Machine learning has become a significant competitive differentiator for many companies. Classical machine learning is often categorized by how an algorithm learns to become more accurate in its predictions. There are four basic approaches: supervised learning, unsupervised learning, semi-supervised learning and reinforcement learning. The type of algorithm data scientists choose to use depends on what type of data they want to predict.

Supervised machine learning requires the data scientist to train the algorithm with both labeled inputs and desired outputs. Unsupervised machine learning algorithms do not require data to be labeled. They sift through unlabeled data to look for patterns that can be used to group data points into subsets. Most types of deep learning, including neural networks, are unsupervised.

In this module we use machine learning for training and testing of the data set that which the admin wants to check whether it is safe or malicious site or image. Machine Learning techniques also helped in creating the dataset which we used for training the system and testing the accuracy of the system. In our work we use python code for extraction features.

MODULE 2 : EXTRACTION

Feature Selection Methods

Feature selection methods are beneficial for the performance of classification algorithms because a large number of extracted features, some of which are redundant or irrelevant, present several problems

such as misleading the learning algorithm, over-fitting, reducing generality, and increasing model complexity and run-time. These bad effects are even more crucial when applying machine learning methods on mobile devices, since they are often restricted by processing and storage-capabilities. Applying fine feature selection before machine learning, enabled the use of malware detectors more efficiently, with a faster detection.

Feature selection methods can be divided into two groups as attribute based and subset based feature selection methods. Attribute based feature selection methods evaluate each feature independent from other features. These methods need a class feature to evaluate each feature with this class feature defined by the analyzer in attribute feature selection methods. The dependency of features to other features is out of consideration but the relation with class features is under consideration in those feature selection methods. Gain Ratio and Relief attribute feature selection methods are this type of methods. In subset based feature selection methods, the subsets of features are constructed and the subset including some number of features which best represent the whole features is selected by feature selection method. In these feature selection methods, the dependency of features to each other and class feature is considered in feature selection. Correlation feature selection(Cfs) and Consistency subset feature selection methods are used for subset type feature selection methods.

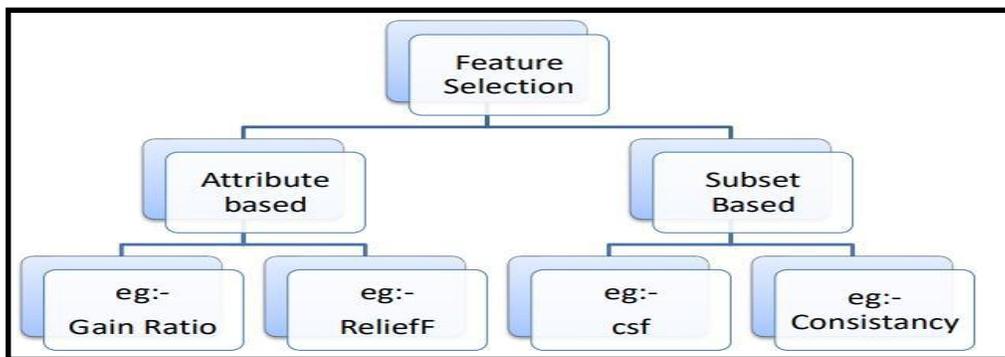


Fig 7.1. Feature selection

In Our project, we extracted some important features from the content that is image or any URL according to each features position we make compression with the contents in the trained set . Then the permissions requested by an application is represented as a binary value, one for each permission, where 1 (TRUE) stays for the presence of that particular permission while 0 (FALSE) stays for its absence. In our database, we also store the application behavior in the last column, saved as either benign or malicious (1 for benign and 0 for malicious).

Example:

Formal ware application

1,1,1,1,1,1,1,1,1,1,1,1,1,1,0,0,0,0,0,0,0,0,1,0

For goodware application

0,0,0,0,0,0,0,1,1,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1

MODULE 3: TRAINING AND TESTING

In a dataset, a training set is implemented to build up a model, while a test (or validation) set is to validate the model built. Data points in the training set are excluded from the test (validation) set. Usually, a dataset is divided into a training set, a validation set (some people use testset instead) in each iteration, or divided into a training set, a validation set and a test set in each iteration. In Machine Learning, we basically try to create a model to predict the test data. So, we use the training data to fit the model and testing data to test it. The models generated are to predict the results unknown which is named as the test set. In contrast to machine learning, fitting means training. There is a fit function in ML, that is used for training of models using data examples. Fit function adjusts weights according to data values so that better accuracy can be achieved.

As we pointed out, in this module the dataset is divided into train and test set in order to check accuracies, by training and testing it on it. Train/Test is a method to measure the accuracy of our model. It is called Train/Test because you split the data set into two sets: a training set and a testing set. The *training* set should be a random selection of 69% of the original data. The *testing* set should be the remaining 31%. In our system we divided the dataset in the same way i.e, 69% for training, and 31% for testing. We *train* the model using the training set. We *test* the model using the testing set. *Train* the model means *create* the model. *Test* the model means test the accuracy of the model.

i) Training Set: Here, you have the complete training dataset. You can extract features and train to fit a model. To train any machine learning model irrespective what type of dataset is being

used you have to split the dataset into training data and testing data. Here we have used the 'train test split' to split the data in 69:31 ratio i.e. 69% of the data will be used for training the model while 31% will be used for testing the model that is built out of it. We got a dataset from Kaggle.

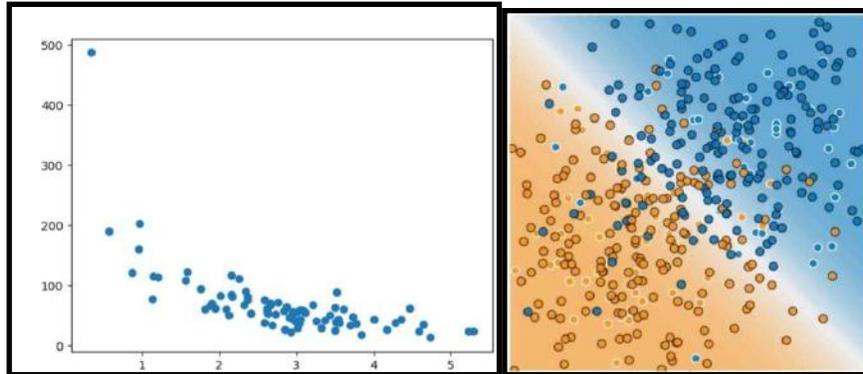


Fig 7.2 Training set

ii) Testing Set: Here, once the model is obtained, you can predict using the model obtained on the training set.

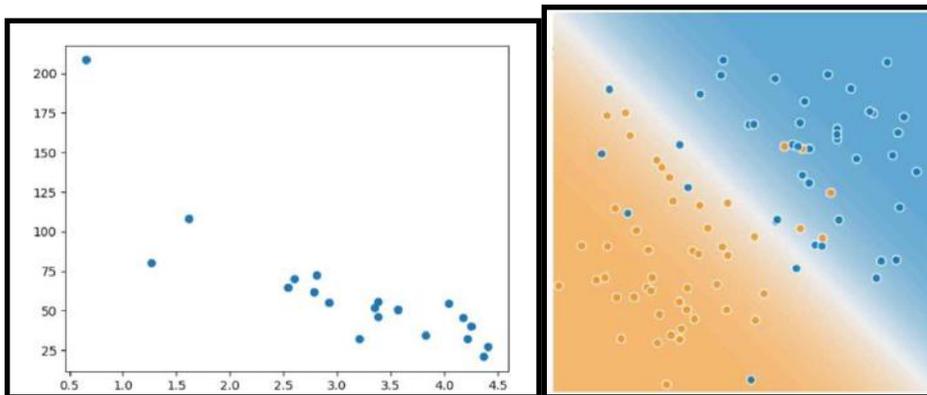


Fig 7.3 Testing set

When splitting a dataset there are two competing concerns:

- If we have less training data, our parameter estimates have greater variance.
- And if we have less testing data, your performance statistic will have greater variance.

The data should be divided in such a way that neither of them is too high, which is more dependent on the amount of data we have. If our data is too small then no split will give you satisfactory variance so we will have to do cross-validation but if your data is huge then it

doesn't really matter whether you choose an 69:31 split or a 70:30 split (indeed you may choose to use less training data as otherwise, it might be more computationally intensive).

MODULE 4: CLASSIFICATION

Machine learning techniques have been widely applied for the detection of malicious applications in the literature. The studies about the detection of malware in the mobile platforms are mostly made by using the classification and clustering analysis. We have used Decision Tree, Gradient Boost, AdaBoost, Naïve Bayes and Random Forest classification analysis for android malware detection approach. The classifiers performances were measured and evaluated in the detection of android malware.

i) Naive Bayes

Naive Bayes classifiers are a collection of classification algorithms based on Bayes Theorem. It is not a single algorithm but a family of algorithms where all of them share a common principle, i.e. every pair of features being classified is independent of each other. A Naive Bayes classifier is a probabilistic machine learning model that's used for classification tasks. Naive Bayes algorithms are mostly used in sentiment analysis, spam filtering, recommendation systems etc. They are fast and easy to implement but their biggest disadvantage is that the requirement of predictors to be independent. In most of the real life cases, the predictors are dependent, this hinders the performance of the classifier. The crux of the classifier is based on the Bayes theorem.

Bayes Theorem:

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}$$

Fig 7.4 Bayes Theorem

where:

$P(A)$ = The probability of A occurring $P(B)$ = The probability of B occurring $P(A| B)$ =The probability of A given B
 $P(B| A)$ = The probability of B given A

The assumption made here is that the predictors/features are independent. That is, the presence of one particular feature does not affect the other. Hence it is called naive.

ii) Random Forest

The idea behind the random forest algorithm is to construct a forest of random trees. It is an ensemble learning method for classification. It works by building a decision tree at training time and outputting the class by individual trees. The training algorithm for random forests uses the general technique of bootstrap aggregating, or bagging, to the learners. The advantages of random forest algorithms are its efficiency on large databases, successfully handling thousands of input variables without deleting any variable. Moreover, it has an effective method for estimating missing data and maintains accuracy when a large proportion of the data are missing. Random forest algorithm is selected in the analysis of permission-based malware detection as a third decision tree algorithm.

In machine learning, classification refers to a predictive modeling problem where a class label is predicted for a given example of input data.

Examples of classification problems include:

- Given an example, classify if it is spam or not.
- Given a handwritten character, classify it as one of the known characters.
- Given recent user behavior, classify as churn or not.

From a modeling perspective, classification requires a training dataset with many examples of inputs and outputs from which to learn. A model will use the training dataset and will calculate how to best map examples of input data to specific class labels. As such, the training dataset must be sufficiently representative of the problem and have many examples of each class label. Class labels are often string values, e.g. *-spam*, *-not spam*, and must be mapped to numeric values before being provided to an algorithm for modeling. This is often referred to as label encoding, where a unique integer is assigned to each class label, e.g. *-spam* = 0, *-no spam* = 1.

The algorithm will generate probable values for an unknown variable for each record in the new data, allowing the model builder to identify what that value will most likely be. The ML.PREDICT function can be used to classify outcomes using the model. Classification can be done during model creation, after model creation, or after a failure (as long as at least 1 iteration is finished). ML.PREDICT always uses the model weights from the last successful iteration.

The predict() function enables us to predict the labels of the data values on the basis of the trained model. The predict() function accepts only a single argument which is usually the data to be tested. It returns the labels of the data passed as arguments based upon the learned or trained data obtained from the model. Thus, the predict() function works on top of the trained model and makes use of the learned label to map and predict the labels for the data to be tested.

4.1 Evaluation Measures for Classification Algorithms

The performance evaluation of feature selection methods and classification algorithms are made in this part of analysis to determine the best performing feature selection method and classification algorithm. The evaluation of classification algorithm implementations are made by looking at Overall Accuracy (ACC), TP Rate (TPR), FP Rate (FPR), Precision (PPV), Recall and F-Measure values which are the output of classification algorithms.

True Positive (TP): Number of correctly identified benign applications.

False Positive (FP): Number of wrongly identified malware applications.

True Negative (TN): Number of correctly identified malware applications.

False Negative (FN): Number of wrongly identified benign applications.

Table below summarizes the four basic classification measures (confusion matrix) described above

		Prediction	
		Malware	Benign
Reality	Malware	TRUE NEGATIVE	FALSE POSITIVE
	Benign	FALSE NEGATIVE	TRUE POSITIVE

Table 7.5 Confusion metrics

CHAPTER-8 IMPLEMENTATION

1. Home page



Fig 8.1 Home page

This is the home page while entering to the web page

2. Admin login page

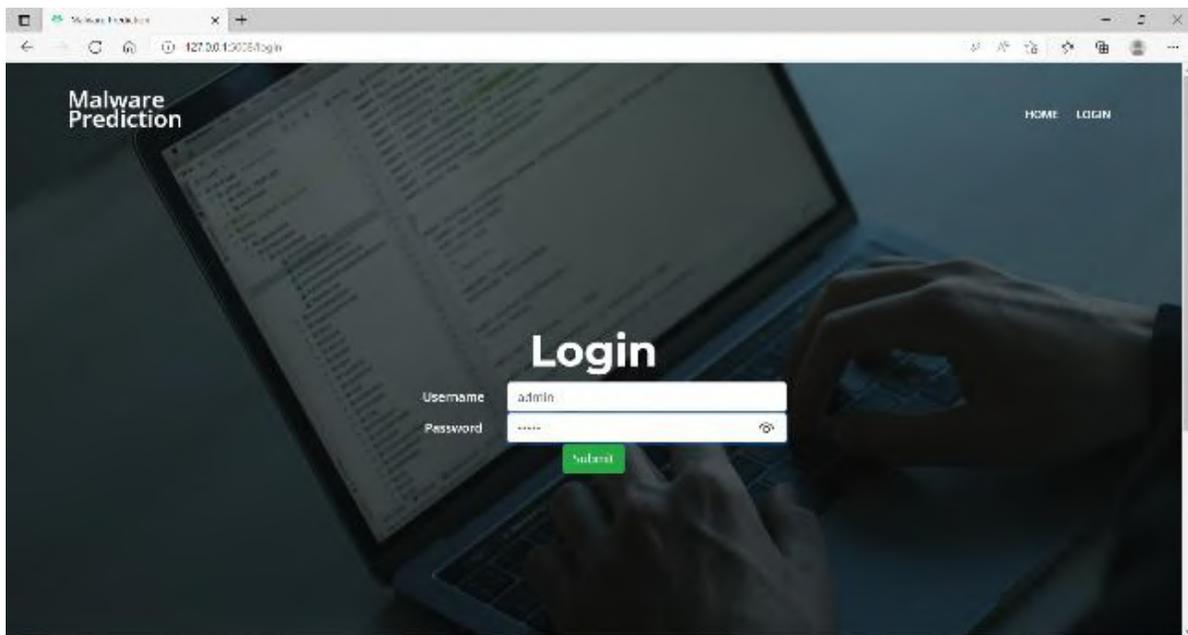


Fig 8.2 Admin login

After entering to the home page, admin can login with a unique username and password and can login by clicking the submit button.

3. Admin's home page

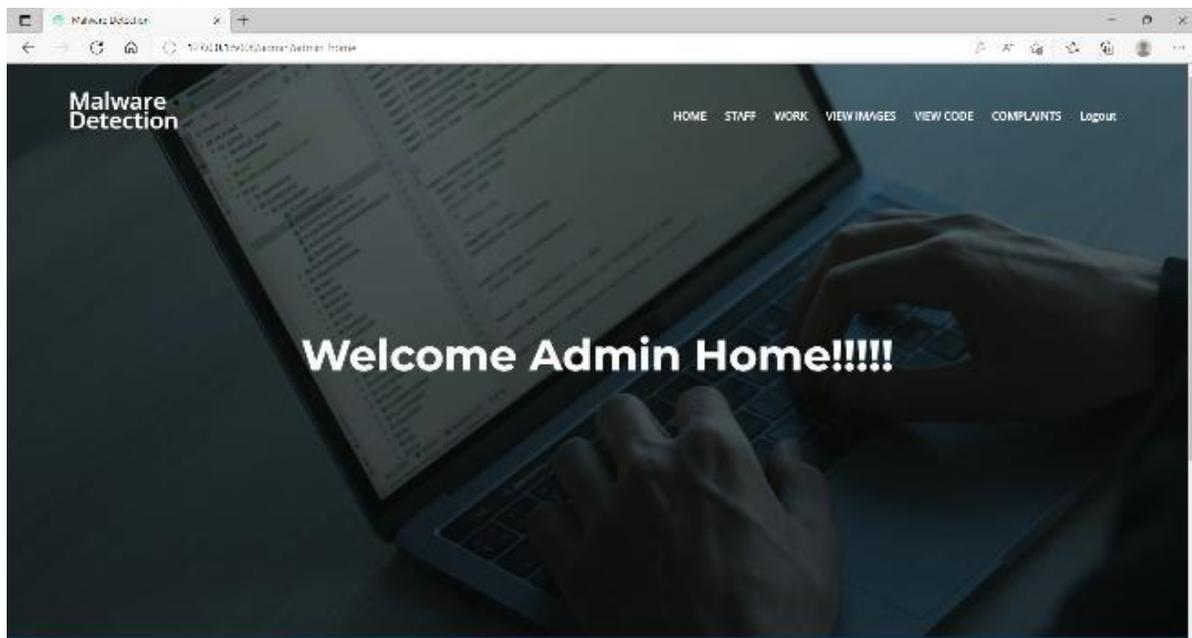


Fig 8.3 Admin home

When admin login with the username and password, admin is directed to a welcome page consist of different tasks such as home, staff, work, view image, complaints and logout.

4. Add Staff

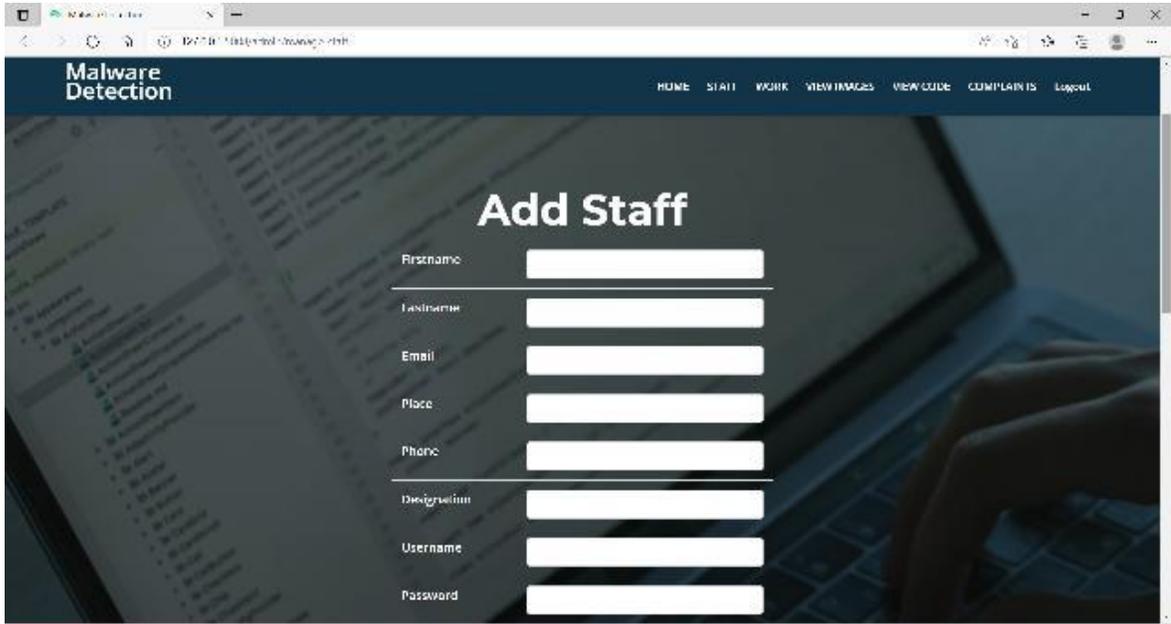


Fig 8.4 Add staff

Admin can add staff details like name, email, place ,phone, designation,etc. Admin provide username and password for the staff to login.

5. Add work for staff

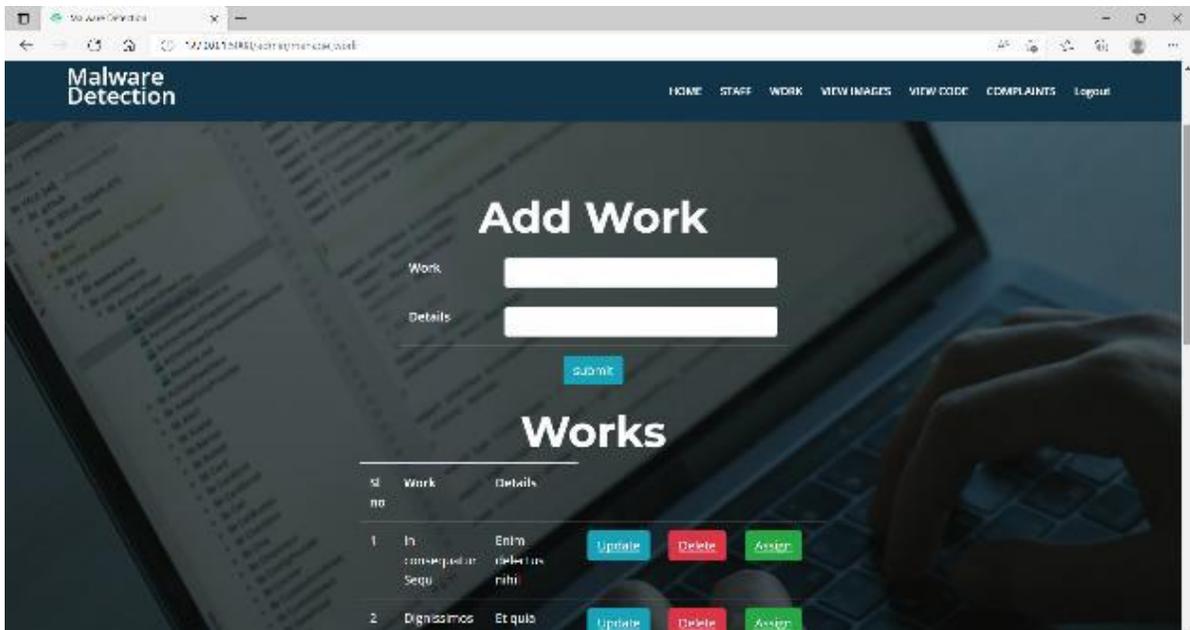


Fig 8.5 Add work

Admin assign works for the staff and can view the works done by the staff. Also update and delete the work is provided.

6. Staff complaints



Fig 8.6 Complaints

Admin can view the complaints send by the staff and can give reply according to their problems.

7. Admin view uploaded URL

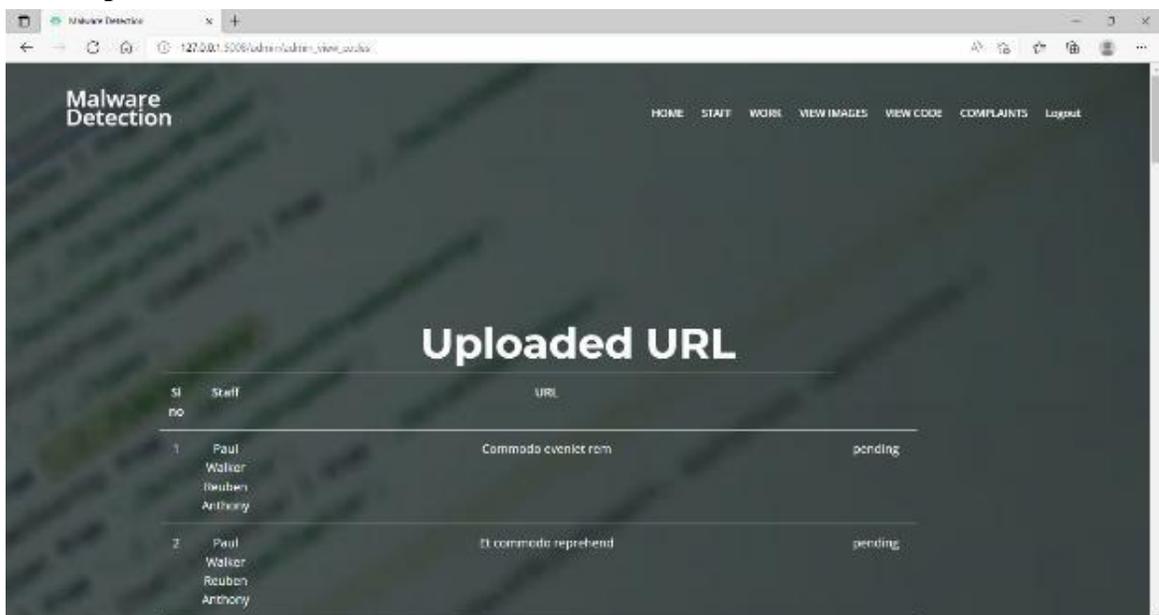


Fig 8.7 View uploaded URLs

Admin can view the uploaded URL and can see if the checked URL is malicious or not.

8. Admin view uploaded image



Fig 8.8 View uploaded images

Admin can view the uploaded image and can see if the checked image is malicious or not.

9. Staff login

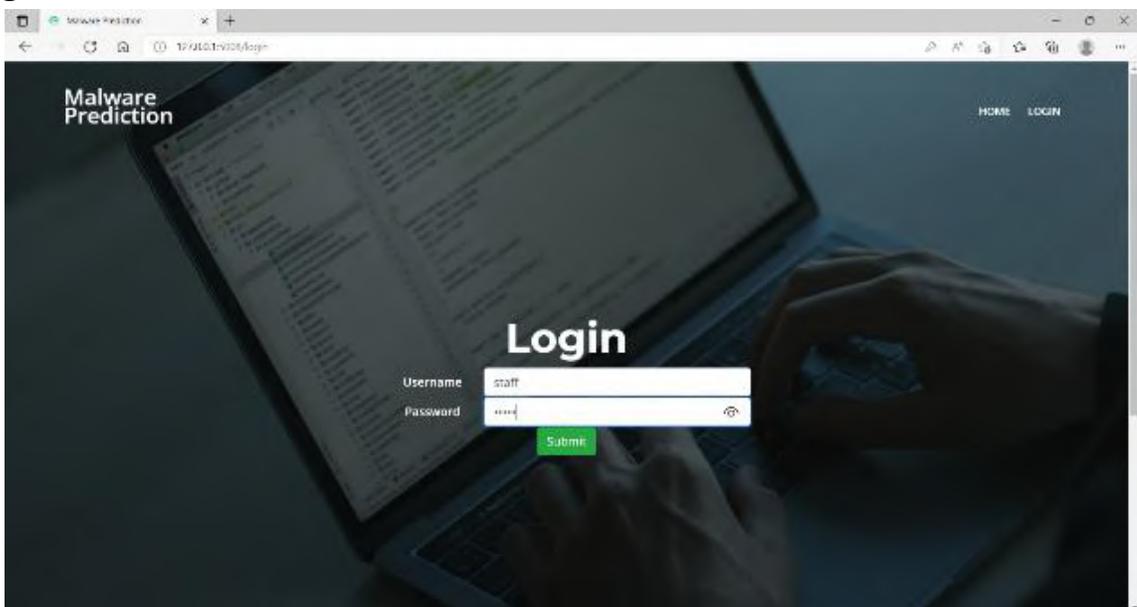


Fig 8.9 Staff login

10. Staff login

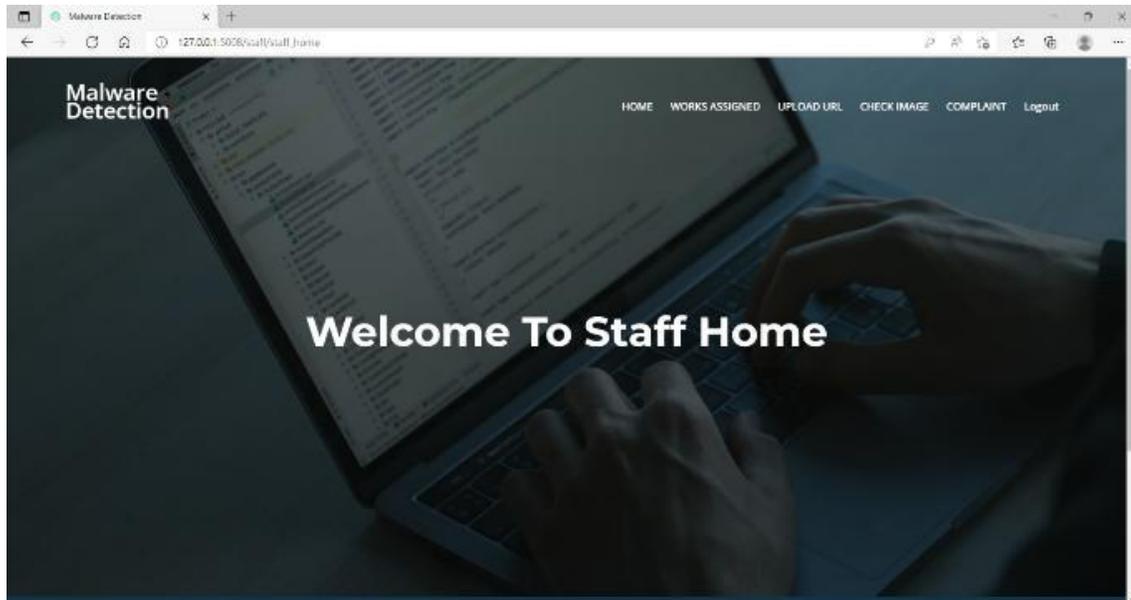


Fig 8.10 Staff home

Staff is directed to a home page of staff ,there staff can view the work assigned ,uplode url and imge for checking malecious or not and can send complaints it any.

11. URL detection

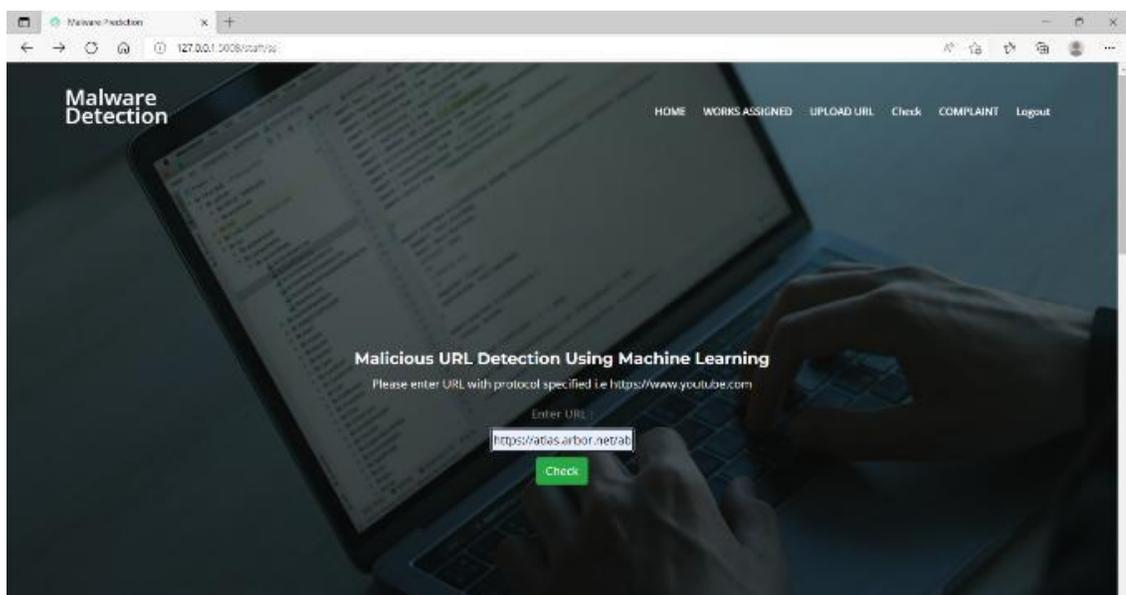


Fig 8.11 Uploading the urls

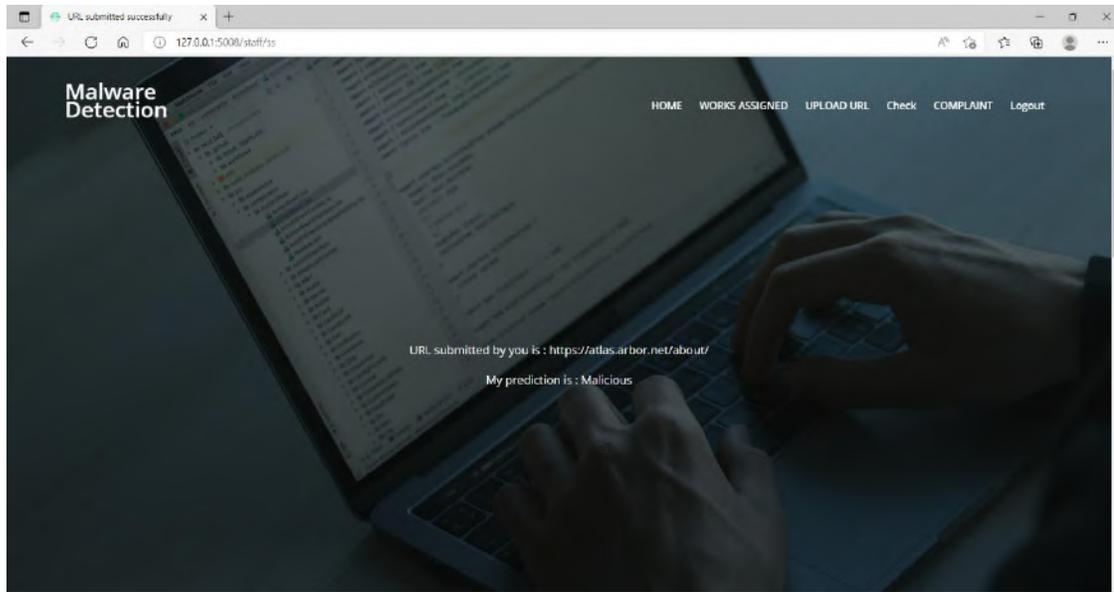


Fig 8.12 Viewing the result (Malicious)

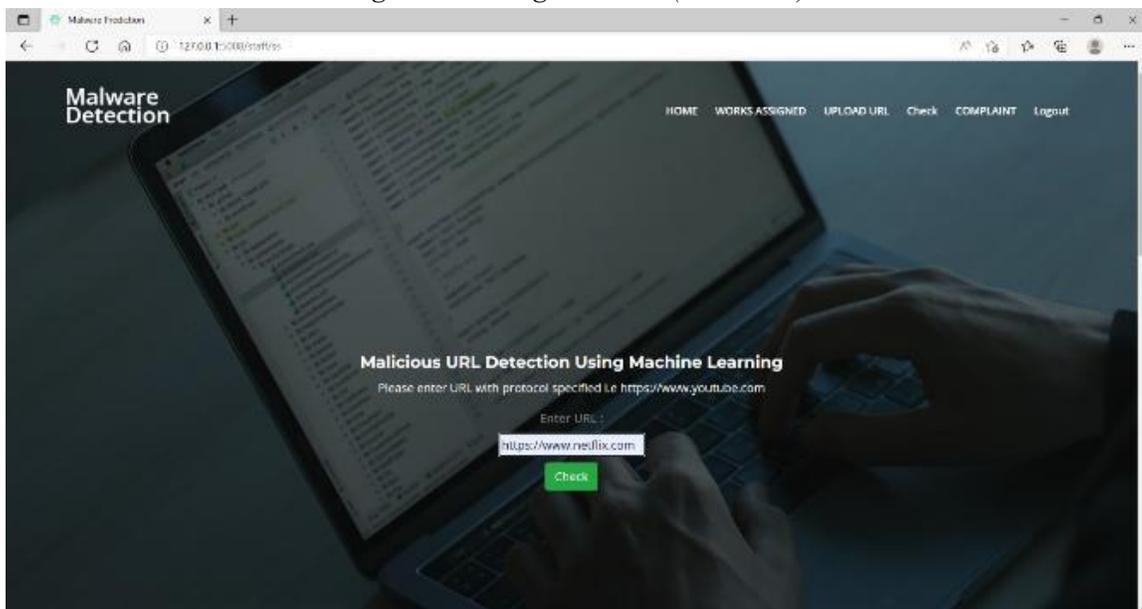


Fig 8.13 Uploading the urls

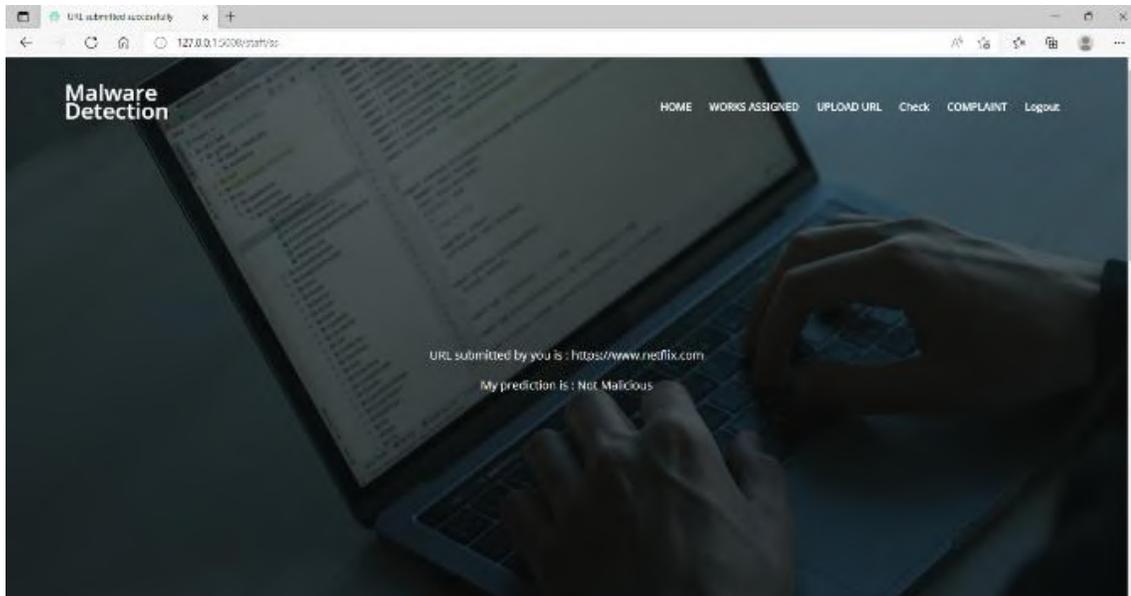


Fig 8.14 Viewing the result (Not Malicious)

Staff can upload urls in the space provided. By clicking the check button the user can view the result according to the url uploded.i.e, malecious or not.

12. Upload image

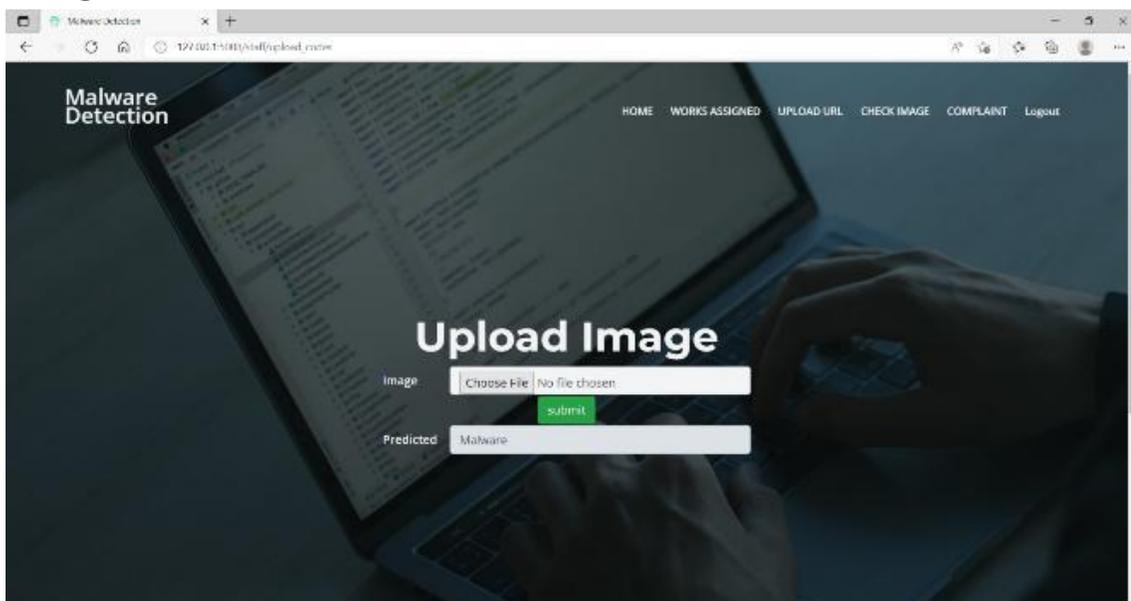


Fig 8.15 Uploading the image and viewing the result (Malware)



Fig 8.16 Uploading the image and viewing the result(safe)

13.Send complaints

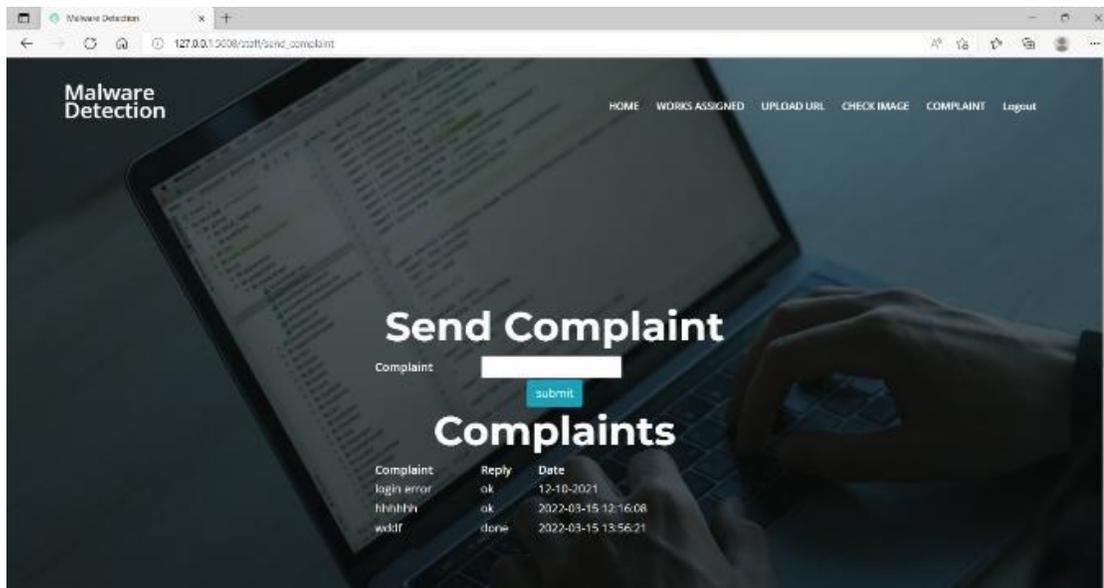


Fig 8.17 Send complaints

User can send complaints if any. Admin will view the complaints and provide better solutions for it.

CHAPTER-9

RESULT AND ANALYSIS

We split the dataset into two subsets, training set and test set. Training set used 69 percent of whole dataset and test set used 31 percent. We performed the experiment 4 times. In each experiment, we randomly selected the training and test set from primary dataset. After creating the training set, we trained the data using linear Naïve bayes algorithm for the classification. For conclusion, these experiments showed that using naïve bayes algorithms for detection of malware is apparently beneficial. The average detection rate is 80%, which is not such bad result. In some cases where the training set was too small, our experiment gave slightly low result. The result of our research is that we demonstrated the malware detection rate of naive bayes algorithm ranges between 80 - 90% where the machine learning data is at least 10000 per class. The detection rate can be increased if we evaluate the features and eliminate low weighed ones.

We take two www.netflix.com and [image static/upload/bd5fe811-8a60-48b0-adcb-f85453177cffmorfedtree.jpg](http://image.static/upload/bd5fe811-8a60-48b0-adcb-f85453177cffmorfedtree.jpg) , extract the features .After analysing the features our machine learning model classifies the file as malware or not malware and the performance of these Naive Bayes algorithms

CHAPTER-10

CONCLUSION

In this work, our prime focus was to develop a machine learning model which can identify malicious samples as truthfully as possible, with zero false-positive rate. Among the different machine learning algorithm we have experimented for malware detection, Naive Bayes algorithm achieved highest accuracy rate.

To be a segment of a competitive business outcome, various alternative strategies must be added to this model. According to our observation, machine learning-based malware detection model is the best technology along with the conventional anti-virus software's. It is very important to note that to enhance the malware detection rate, the machine learning models are highly essential and also result in better accuracy. Machine learning systems must be developed in such a way that the results being delivered to the end-user are ethical, easy to understand and allow for proper monitoring.

REFERENCES

1. Justin Sahs and Latifur Khan- "A Machine Learning Approach to Android Malware Detection", Justin Sahs and Latifur Khan University of Texas at Dallas Dallas TX 75080, USA
2. Anik Dewanje and Kakelli Anil Kumar- "A New Malware Detection Model using Emerging Machine Learning Algorithms"
3. Aviral Sangal and Dr. Harsh Kumar Verma- "A Static Feature Selection-based Android Malware Detection Using Machine Learning Techniques."
4. Ivan Firdausi- "Analysis of machine learning techniques used in behavior-based malware detection."
5. Min Feng and Rajiv Gupta- "Detecting Virus Mutations Via Dynamic Matching."
6. Batta Mahesh- "Machine Learning Algorithms."
7. Bugra Cakir and Erdogan Dogdu- "Malware Classification Using Deep Learning Methods."
8. Baigal tugsSanjaa and Erdenebat Chuluun- "Malware Detection Using Linear SVM."
9. Haiyi Zhang and Di Li- "Naïve Bayes Text Classifier."

APPENDIX

MAIN CODE

```

from flask import *

from public import public

from admin import admin

from staff import staff

from database import *

# //////////////////////////////////

from flask import Flask, render_template

from flask_wtf import FlaskForm as Form

from wtforms import StringField

from wtforms.validators import InputRequired, URL

import joblib

import re

# //////////////////////////////////

app=Flask(__name__)

app.secret_key='abc'

app.config['SECRET_KEY']= 'aa'

app.register_blueprint(public)

app.register_blueprint(admin,url_prefix='/admin')

app.register_blueprint(staff,url_prefix='/staff')

def trim(url):

    return re.match(r'(?!\w*://)?(?:\.)?([a-zA-Z-1-9]\.[a-zA-Z]{1,})\.*', url).groups()[0]

def getTokens(input):

    tokensBySlash = str(input.encode('utf-8')).split('/')

    allTokens = []

    for i in tokensBySlash:

        tokens = str(i).split('-')

```

```

tokensByDot = []
for j in range(0,len(tokens)):
    tempTokens = str(tokens[j]).split('.')
    tokensByDot = tokensByDot + tempTokens
allTokens = allTokens + tokens + tokensByDot
allTokens = list(set(allTokens))
if 'com' in allTokens:
    allTokens.remove('com')
return allTokens
class LoginForm(Form):
    url = StringField('Enter URL : ', validators=[InputRequired(), URL()])

@app.route('/staff/ss', methods=['GET', 'POST'])
def ss():
    sid=session['staff_id']
    form = LoginForm()
    if form.validate_on_submit():
        model = joblib.load('pre-trained/mal-logireg1.pkl')
        vectorizer = joblib.load("pre-trained/vectorizer1.pkl")
        prediction = model.predict(vectorizer.transform([trim(form.url.data)]))
        if prediction[0] == 0:
            #prediction = "NOT MALICIOUS"
            q="insert into predict values(null,'%s','%s','NOT
MALICIOUS')"%(sid,trim(form.url.data))
            print(q)
            insert(q)
            return render_template("success.html", url = form.url.data, status =
"Not Malicious")
        else:

```

```

        q="insert into predict
values(null,'%s','%s','MALICIOUS')"%(sid,trim(form.url.data))

        print(q)

        insert(q)

        #prediction = "MALICIOUS"

        return render_template("success.html", url= form.url.data, status =
"Malicious")

        #return render_template('success.html', url = form.url.data, prediction =
prediction)

        return render_template('index.html', form=form)

app.run(debug=True,port=5008)

```

GLCM CODE

```

import cv2

from skimage.feature import greycocomatrix, greycoprops

def glfeature(img):

    xs=[]

    img = cv2.cvtColor(cv2.imread(img), cv2.COLOR_BGR2GRAY)

    glcm = greycocomatrix(img, [5], [0], 256, symmetric=True, normed=True)

    xs.append(greycoprops(glcm, 'contrast')[0,0])

    xs.append(greycoprops(glcm, 'dissimilarity')[0, 0])

    xs.append(greycoprops(glcm, 'homogeneity')[0, 0])

    xs.append(greycoprops(glcm, 'ASM')[0, 0])

    xs.append(greycoprops(glcm, 'energy')[0, 0])

    xs.append(greycoprops(glcm, 'correlation')[0, 0])

    # print("xssssssssssss",xs)

    return xs

```

PUBLIC CODE

```

from flask import *

from database import *

public=Blueprint("public",_name_)

@public.route('/')

```

```

def index():
    return render_template('index1.html')

@public.route('/login',methods=['get','post'])
def login():
    if 'submit' in request.form:
        user_name=request.form['uname']
        pswrd=request.form['pwd']
        q="select * from login where password='%s' and
password='%s'"%(user_name,pswrd)
        res=select(q)
        if res:
            if res[0]['usertype']=='admin':
                return redirect(url_for('admin.admin_home'))
            if res[0]['usertype']=='staff':
                q="select * from staff where login_id='%s'"%(res[0]['login_id'])
                res=select(q)
                session['staff_id']=res[0]['staff_id']
                return redirect(url_for('staff.staff_home'))

    return render_template('login.html')

```

SAMPLE CODE

```

from os import walk
import os
import numpy as np
from myknn import *
from glcm import glfeature
def train():
    data=[]

```

```

samples=[]
names=[]
for dir,d_path,filenames in walk("static/dataset/Safe"):
    for file in filenames:
        sample=glfeature(os.path.join(dir,file))
        names.append(1)
        samples.append(sample)
for dir,d_path,filenames in walk(r"static/dataset/Malware"):
    for file in filenames:
        sample=glfeature(os.path.join(dir,file))
        names.append(2)
        samples.append(sample)

np.savetxt("sample.data",samples)
np.savetxt("labels.dat",names)
# train()
res=prep("static/dataset/Safe/4.jpg")
print(res,"result")

```

STAFF CODE

```

from flask import *
from database import *
import uuid
from test import mains
from train import train_me
import urllib
# from apps import *
from myknn import *
staff=Blueprint("staff",_name_)
@staff.route('/staff_home',methods=['get','post'])
def staff_home():

```

```
        return render_template('staff_home.html')
    @staff.route('/view_works_assigned',methods=['get','post'])
def view_works_assigned():
    data={}
    q="select * from works where staff_id='%s'"%(session['staff_id'])
    print(q)
    res=select(q)
    data['works']=res
    if 'action' in request.args:
        action=request.args['action']
        id=request.args['id']

    else:
        action=None
    if action=='upload':
        q="select * from works where work_id='%s' "%(id)
        res=select(q)
        print(res,'.....')
        data['up']=res
    if 'upload' in request.form:
        file=request.files['file']
        path='static/upload/'+str(uuid.uuid4())+str(file.filename)
        file.save(path)
        q="insert into uploadfiles values(NULL,'%s','%s')"%(id,path)
        insert(q)
        return redirect(url_for('staff.view_works_assigned'))
    return render_template('staff_view_works_assigned.html',data=data)
```

```

@staff.route('/send_complaint',methods=['get','post'])
def send_complaint():
    data={}
    if 'submit' in request.form:
        complaint=request.form['complaint']
        q="insert into complaints values
(NULL,'%s','%s','pending',now())"%(session['staff_id'],complaint)
        insert(q)
        return redirect(url_for('staff.send_complaint'))
    q="select * from complaints where staff_id='%s'"%(session['staff_id'])
    res=select(q)
    data['complaints']=res
    return render_template('staff_send_complaint.html',data=data)

@staff.route('/upload_code',methods=['get','post'])
def upload_code():
    data={}
    if 'submit' in request.form:
        # try:
            url=request.form['code']
            print(url)
            # print(url)
            urllib.request.urlretrieve(url, "markup.txt")

            print("In Here")
            predictss=mains(url)
            q="insert into predict values
(NULL,'%s','%s','%s')"%(session['staff_id'],url,predictss)
            insert(q)
            return redirect(url_for('staff.upload_code'))

        # except:

```

```

        #      flash("Entered Link is not correct")
        q="select * from predict where staff_id='%s'"%(session['staff_id'])
        res=select(q)
        data['code']=res
        return render_template('staff_upload_code.html',data=data)
@staff.route("/urlupload")
def home():
    return render_template("popup.html")

@staff.route("/check/", methods=['POST'])
def check_url():
    url = request.form.get("url")
    print("cc"+url)
    urllib.request.urlretrieve(url, "markup.txt")

    print("In Here")
    return mains(url)
@staff.route('/upload_codes',methods=['get','post'])
def upload_codes():
    data={}
    sid=session['staff_id']
    if 'submit' in request.form:
        val=""
        image=request.files['image']
        path="static/upload/"+str(uuid.uuid4()+image.filename)
        image.save(path)
        s=prep(path)
        print(s)
        if s=="1":
            val="Safe"

```

```

        q="insert into uploadfiles values(null,'%s','%s','Safe')"%(sid,path)
        insert(q)
    elif s=="2":
        val="Malware"
        q="insert into uploadfiles values(null,'%s','%s','Malware')"%(sid,path)
        insert(q)
    print(val)
    data['output']=val

    return render_template('staff_upload_codes.html',data=data)

```

ADMIN CODE

```

from flask import *
from database import *
admin=Blueprint("admin",_name_)
@admin.route('/admin_home',methods=['get','post'])
def admin_home():
    return render_template('admin_home.html')
@admin.route('/manage_staff',methods=['get','post'])
def manage_satff():
    data={}
    if 'submit' in request.form:
        fname=request.form['fname']
        lname=request.form['lname']
        email=request.form['email']
        phone=request.form['phone']
        place=request.form['place']
        designation=request.form['designation']
        uname=request.form['uname']
        password=request.form['password']
        q="insert into login values(NULL,'%s','%s','staff')"%(uname,password)

```

```

        id=insert(q)

        q="insert into staff
values(NULL,'%s','%s','%s','%s','%s','%s',curdate())"%(id,fname,lname,place,phone,email,designation)

        insert(q)

        return redirect(url_for('admin.manage_satff'))

if 'action' in request.args:

    action=request.args['action']

    id=request.args['id']

else:

    action=None

if action=="delete":

    q="delete from staff where staff_id='%s'"%(id)

    delete(q)

    return redirect(url_for('admin.manage_satff'))

if action=="update":

    q="select * from staff where staff_id='%s'"%(id)

    res=select(q)

    print(res)

    data['updater']=res

if 'update' in request.form:

    email=request.form['email']

    phone=request.form['phone']

    place=request.form['place']

    designation=request.form['designation']

    q="update staff set email='%s',phone='%s',place='%s',designation='%s' where
staff_id='%s'"%(email,phone,place,designation,id)

    update(q)

    return redirect(url_for('admin.manage_satff'))

q="select * from staff"

```

```
res=select(q)
data['staff']=res
return render_template('admin_manage_staff.html',data=data)

@admin.route('/manage_work',methods=['get','post'])
def manage_work():
    data={}
    q="select * from staff"
    res=select(q)
    data['staff']=res
    if 'submit' in request.form:
        work=request.form['work']
        details=request.form['details']
        q="insert into works values(NULL,0,'%s','%s',now())"%(work,details)
        insert(q)
    q="select * from works"
    res=select(q)
    data['works']=res
    if 'action' in request.args:
        action=request.args['action']
        id=request.args['id']
    else:
        action=None
    if action=="delete":
        q="delete from works where work_id='%s'"%(id)
        delete(q)
        return redirect(url_for('admin.manage_work'))
    if action=='update':
        q="select * from works where work_id='%s'"%(id)
        res=select(q)
```

```

        data['updater']=res
    if 'update' in request.form:
        details=request.form['details']
        q="update works set details='%s' where work_id='%s'"%(details,id)
        update(q)
        return redirect(url_for('admin.manage_work'))

    if action=='assign':
        q="select * from works where work_id='%s'"%(id)
        res=select(q)
        data['assign']=res

    if 'assign' in request.form:
        staff_id=request.form['staff_id']
        print(staff_id,"////////////////////")
        q="update works set staff_id='%s',assigned_date=curdate() where
work_id='%s'"%(staff_id,id)
        print(q,'////////////////////')
        id=update(q)
        print(id,'.....')
        return redirect(url_for('admin.manage_work'))

    if action=='assigned':
        q="select * from works inner join staff using(staff_id) where
work_id='%s'"%(id)
        res=select(q)
        print(res,'.....')
        data['assigned']=res

    return render_template('admin_manage_work.html',data=data)

@admin.route('/view_complaints',methods=['get','post'])
def view_complaints():
    data={}

    q="select * from complaints inner join staff using(staff_id)"
    res=select(q)

```

```

data['complaints']=res
if 'action' in request.args:
    action=request.args['action']
    id=request.args['id']
    session['cid']=id

else:
    action=None

if action=='reply':
    q="select * from complaints inner join staff using(staff_id) where
complaint_id='%s'"%(id)
    res=select(q)
    data['complaint']=res
    return render_template('admin_send_reply.html',data=data)
    return render_template('admin_view_complaints.html',data=data)

@admin.route('/reply_complaints',methods=['get','post'])
def reply_complaints():
    reply=request.form['reply']
    q="update complaints set reply='%s' where complaint_id='%s'"%(reply,session['cid'])
    update(q)
    return redirect(url_for('admin.view_complaints'))

@admin.route('/admin_view_codes',methods=['get','post'])
def admin_view_codes():
    data={}
    q="SELECT * FROM predict INNER JOIN staff USING(staff_id)"
    res=select(q)
    data['code']=res

```

```
        return render_template('admin_view_codes.html',data=data)
@admin.route('/admin_view_upload_files',methods=['get','post'])
def admin_view_upload_files():
    data={}
    q="SELECT * FROM works INNER JOIN uploadfiles USING(work_id)"
    res=select(q)
    data['code']=res
    return render_template('admin_view_upload_files.html',data=data)
```

ST.TERESA'S COLLEGE

(AUTONOMOUS)

AFFILIATED TO MAHATMA GANDHI UNIVERSITY



PREDICTING HOUSE PRICE MASTER

PROJECT REPORT

In partial fulfillment of the requirement for the award of the degree of

BACHELOR OF SCIENCE IN

COMPUTER APPLICATIONS

[TRIPLE MAIN]

By

Revathy.T.V

III B.Sc. Computer Applications[Triple Main]

Register No:SB19CA022

Under the guidance of

Mrs Harsha

DEPARTMENT OF COMPUTER APPLICATIONS

2019-2022



ISO 9001 2015 Certified Organization



APRIL 5, 2022

TO WHOM SO EVER IT MAY CONCERN

This is to certify that REVATHY. T.V, 6th semester BSc COMPUTER APPLICATION (Triple Main) student of ST. TERESAS COLLEGE, ERNAKULAM has successfully completed a project titled "PREDICTING HOUSE PRICES MASTER" from our organization.

The duration of the project was for 3 months. The Project was incorporated in PYTHON and was implemented successfully.

Thanking you,

For LCC Computer Education

T.S. Ramaswamy
Director



CERTIFICATE



This is to certify that the project report entitled "Predicting House Price Master", a bona fide record of the work done by REVATHY.T.V (Register no: SB19CA022) during the year 2019-2022 and submitted in partial fulfilment of the requirements for the degree of Bachelor of science in computer Application[Triple Main] under Mahatma Gandhi University, Kottayam.

Head of the Department

Internal Examiner



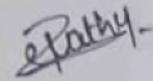
External Examiner

DECLARATION

I, Revathy.T.V, B.sc. Computer Application[Triple Main] final year student of St.Teresa's College (Autonomous), Ernakulam, Register no:SB19CA022, hereby declare that the dissertation submitted for the Bachelor's Degree in Computer Application is my original work. I further declare that the said work has not previously been submitted to any other university or academic

Date : 06/04/2022

Place : ERNAKULAM



Revathy.T.V

ACKNOWLEDGEMENT

It is my privilege to express sincerest regards to our teachers and the project coordinators, for their valuable inputs, able guidance, encouragement, whole-hearted cooperation and constructive criticism throughout the duration of the project. I deeply express sincere thanks to, Head of Department Raji S Pillai for encouraging and allowing me to present the project on the topic “Predicting House Price Master” at our department premises for the partial fulfilment of the requirements leading to the award of BSc degree. I take this opportunity to thank all our lecturers who have directly or indirectly helped our project and also pay our respects and love to our parents and all other family members for their love and encouragement. Last but not the least, I express my thanks to my friends for their cooperation and support.

Revathy.T.V

SYNOPSIS

The purpose of the project Predicting-House-prices-master is a one stop rental or seller portal. It provides services Such as Hiring Service Apartments or buy apartment. This application is providing some additional features for vendors to edit or delete their products. Customers no need to register with our site they just search and place orders in our site. We are responsible for communication between customer and the vendor and maintain the database. It also providing an extra module that it accepts feedback from the customers. The application provides an extra feature that is "Relocation Services".

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1. INTRODUCTION

1.1 About Project

The purpose of the project Predicting-House-prices-master is a one stop rental or seller portal. It provides services Such as Hiring Service Apartments or buy apartment. This application is providing some additional features for vendors to edit or delete their products. Customers no need to register with our site they just search and place orders in our site. We are responsible for communication between customer and the vendor and maintain the database. It also providing an extra module that it accepts feedback from the customers. The application provides an extra feature that is “Relocation Services”.

1.2 About Organization

LCC founded in cochin back in the year 1992, LCC started its journey as a premier computer coaching centre and later advanced into one of the most reputed branches for computer learning throughout India. LCC has surpassed victory in finding and refining those hidden talents in our pupils, to deliver thousands of IT prosto the evergreen IT industry every year.

1.3 Objectives of the project and the organization

The purpose of the project Predicting-House-prices-master is a one stop rental or seller portal. It provides services Such as Hiring Service Apartments or buy apartment. This application is providing some additional features for vendors to edit or delete their products. Customers no need to register with our site they just search and place orders in our site. We are responsible for communication between customer and the vendor and maintain the database. It also providing an extra module that it accepts feedback from the customers. The application provides an extra feature that is “Relocation Services”.

2. SYSTEM ANALYSIS

2.1 Introduction

System analysis is the process of gathering data and facts diagnosing problem to the system. In the development of software structural analysis is required. During this analysis, information is collected in the form of answers to the question for collecting information from existing documents. Analysis specifies what the system should do. Problem definition deals with defining the actual problem involved in the existing system or the system to be developed. Studies on various areas covered by the existing system are classified into various divisions and the actual task to be performed in the new system is determined. The project will be able to demonstrate the ideas of a website which helps the public. The website is trying to revitalize and simplify the various functions and activities and make them more people friendly. We dedicated to providing better and speedy services to the public. System analysis is the detailed study of various operations and their relationship within and outside the system. It is the first in the developing and managing systems. System analysis is concerned with becoming aware of the problem, identifying the relevant and most decisional variables, analyzing and synthesizing the various factors and determining an optimal or at least as at is factory solution or program of action. A preliminary study was conducted in details and several fact-finding techniques like record searching, observation, comparison etc. were used to reach a better decision. The current system for this each activity was deeply studied and analyzed. All the forms and other printed or non-printed formats for data collection were checked accurately and findings were compared. Observation was done to great extend to see the difficulties of the process and time delay in findings the results. Accurate study was conducted to know the system in a much better manner. The objectives of the system analysis are:

- Identifying the need.
- Analyzing the existing and proposed system.
- Evaluating the feasibility study.
- Perform economic and technical analysis.
- Identifying the hardware and software requirements
- . ▪ Allocating functions to the hardware and software.

2.2 Existing System

If anybody want to rent a Home, apartment from a particular city, how it is possible? If one person is going to another city, but if he wants products for rent before he reaches his destination, then how it possible? So, answer to these questions is our web site. There are many rental systems which are available online. But they are not providing all cities at one place. Also, many of them restricted to only one city. Communication between customer and

the vendor. Also present rental systems restricted to only one vendor means products are supplied only from one rental show room.

2.3 Proposed System

The proposed system is a web-based system which can be accessed by customer from anywhere around the world. The system can offer a greater number of products from vendor in different locations. A vendor directly registers into this system using this system user interface without any manual approach. He can pay his amount for advertising his own rental product through submitting the credit card number. The proposed system can accept any type of house for rental, or sale this system interface Support to the vendors to upload their product image into the system. A customer directly interacts with this product image and gets necessary information regarding the rental products.

2.4 System Specification

The software requirements specification (SRS) is a means of translating the ideas in the minds of clients into a formal documentation. This document forms the development and software validation. The basic reason for the difficulty in software requirement specification comes from the fact that there are three interested parties-the clients, the end users and the software developer. The requirements document has to be such that the client and the user can understand easily, and the developers can use it as a basis for software development. Due to the diverse parties involved in software requirement specification, a communication gap exists. This gap arises when the client does not understand software or the software development processor when the developer does not understand the client's problem and application area of SRS bridges this communication gap. Problem analysis is done to obtain a clear understanding of the needs of the clients and the users, and what exactly is desired from the software. Analysis leads to the actual specification. People performing the analysis called analysts, area also responsible for specifying the requirements. The software project is initiated by the client's needs. In the beginning these needs are in the minds of various people in the client organization. The requirement analyst must identify their requirements by talking to these people and understanding their needs. These people and the existing documents about the current mode of operation are the basis source of information for the analyst.

2.5 Operating System

An Operating system (OS) is an interface between computer user and computer hardware. It is a software which performs all the basic tasks like file management, memory, management, process management, handling input and output and controlling peripheral devices such as disk drivers and printers. The operational required for proper execution of the system is window7 and above.

2.6 Languages and Software Specification

Python

Python is a general-purpose interpreted, interactive, object-oriented, and highlevel programming language.

Django

Django is a Python based free and open-source web framework, which follows the model-template-view (MTV) architectural pattern. Django's primary goal is to ease the creation of complex, database driven websites. The framework emphasizes reusability and pluggability of components, less code, low coupling, rapid development, and the principle of don't repeat yourself. Python is used throughout, even for settings files and data models. Django also provides an optional administrative create, read, update and delete interface that is generated dynamically through introspection and configured via admin models.

Hypertext mark-up language(HTML)

It is the standard mark-up language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript.

Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HTML elements are the building blocks of HTML pages. With HTML constructs, images and other objects such as interactive forms may be embedded into the rendered page. HTML provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. HTML elements are delineated by *tags*, written using angle brackets.

Tags such as `` and `<input />` directly introduce content into the page.

Other tags such as `<p>` surround and provide information about document text and may include other tags as sub-elements. Browsers do not display the HTML tags but use them to interpret the content of the page.

HTML can embed programs written in a scripting language such as JavaScript, which affects the behaviour and content of web pages. Inclusion of CSS defines the look and layout of content.

Cascading Style sheets(CSS)

It is a style sheet language used to describe the presentation of a document written in HTML or XML (including XML dialects such as SVG, Math or XHTML). CSS describes how elements should be rendered on screen, on paper, in speech, or on other media.

JavaScript

MYSQL JavaScript is a high-level, often just-in-time compiled language that conforms to the ECMAScript standard. It is dynamic typing, prototype-based object-orientation, and first-class functions

MySQL

MySQL is the most popular open-source Relational SQL Database management System. MySQL is used for developing various web-based software applications.

PHPMYADMIN

PhpMyAdmin is a (web application) client for MySQL. MySQL is server where your commands get executed and returns you data, it manages all about data while PhpMyAdmin is a web Application, with user friendly, easy to use GUI makes it easy to handle database, which is difficult to use on command line. phpMyAdmin is the web application written primarily in PHP. It is used for managing MySQL database.

2.7 Hardware and Software Specification

Software Specification

Operating system	: Windows
Web technologies	: python, Django, html, CSS
Database	: MySQL
Web browser	: Google Chrome/Mozilla Firefox

Hardware Specification

MACHINE	: INTEL DUAL CORE
MOTHER BOARD	: INTEL 945 CHIPSET
MEMORY	: 4 GB HARD DISK : 500 GB
MONITOR	: 18.5" LED MONITOR
KEYBOARD	: USB/3
MOUSE	: USB/3

3. SYSTEM DESIGN

3.1 Introduction

System design is the process of defining the.

Architecture, modules, interfaces, and data for a system to satisfy specified requirements. System design could be seen as the application of systems theory to product development. There is some overlap with the disciplines of system analysis, systems architecture and systems engineering.

TYPES OF SYSTEM DESIGN

Logical Design

Logical design pertains to an abstract representation of the data flow, inputs and outputs of the system. It describes the inputs (source), outputs (destinations), databases (data stores), procedures (data flows) all in a format that meets the user requirements.

Physical Design

Physical design relates to the actual input and outputs processes of the system. It focuses on how data is entered into a system, verified, processed, and displayed as output.

Architectural Design

It is also known as high level design that focuses on the design of system architecture. It describes the structure and behavior of the system. It defines the structure and relationship between various modules of system development process.

Detailed Design

It follows Architectural design and focuses on development of each module.

Conceptual Data Modelling

It is representation of organization data which includes all the major entities and relationship. System analyses develop a conceptual data model for the current system that supports the scope and requirement for the proposed system.

INPUT DESIGN

Input design is a part of the overall design. The input methods can be broadly classified. Internal controls must be established for monitoring the number of inputs and for ensuring that the data are valid. The basic steps involved in input design are:

- Review input requirements.
- Decide how the input data flow will be implemented.
- Decide the source document.
- Prototype online input screens.

- Design the input screens.

The quality of the system input determines the quality of the system output. Input specifications describe the way data enter the system for processing. Input design features can ensure the reliability of the system and produce result.

OUTPUT DESIGN

A quality is one, which meets the requirements of end user and present the information clearly. In any system results of processing are communicated to the user and to the other system through outputs. In the outputs design it is determined how the information is to be displayed for immediate need.

It is the most important and direct source information is to user. Efficient and intelligent output design improves the system's relationships with the user and helps in decision making. The objectives of the output design are to convey the information of all the past activities, current status and to emphasis important events. The output generally refers to the results and information that is generated from the system. Outputs from computes are required primarily to communicate the result of processing to the users.

Output also provides a means of storage by coping the results for later reference in consolation. There is a chance that some of the end users will not actually operate the input data or information through workstations but will see the output from the system.

Two phases of the output design are:

1. Output Definitions
2. Output Specification

Output definitions considers the type of outputs contents, its frequency and its volume, the appropriate outputs media is determined for output. Once the media is chosen, the details specification of output documents are carried out. The nature of output required from the proposed system is determined during logical design stage. It takes the outline of the output from the logical design and produces output as specified during the logical design phase. In a project, when designing the output, the system must accomplish the following:

- Determine the information to present.
- Decide whether to display, speak the information and select the output medium.
- Arrange the information in acceptable format.
- Decide how to distribute the output to the intended receipt.

Thus, by following the above specification, a high-quality output can be generated. Outputs from compute system are required primarily to communicate thee result of processing to users. Computer output is the most important and direct source of information to the user. Efficiency, intelligible output should improve the system's relationship with the user and help in decision making. The output devices to consider depend on factors as compatibility of the device with the system, response time requirements, expected print quality, number of copies

needed etc.

3.2 Data Flow Diagram

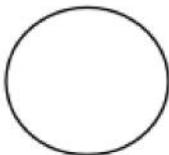
A data flow diagram (DFD) is a graphical representation of the flow of data through an information system. A DFD is often used as a primary step to create an overview of the system, which can later be elaborated.

A DFD shows what will be the input of the system as well as the output. It clearly represents where the data will come from and go to, and where there data will be stored.

The following are some DFD symbols used in the project.



Rectangle: - It defines a source or destination of system data.



Circle: - It represents a process that transforms incoming data flow into outgoing data flow.



Arrow: - It defines data flow. It is a pipeline through which information flows.



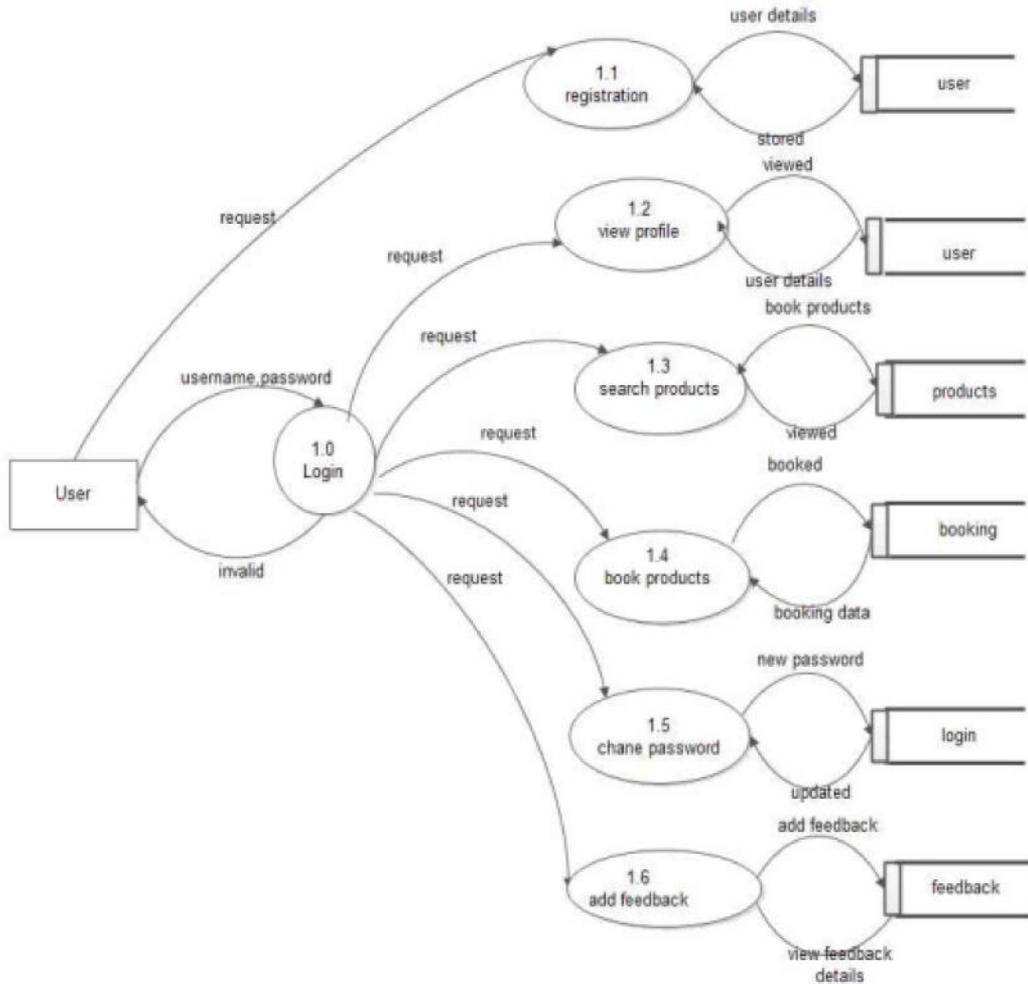
Open rectangle: - It is used to store data or a temporary repository of data.

Contextual Level (zero level)

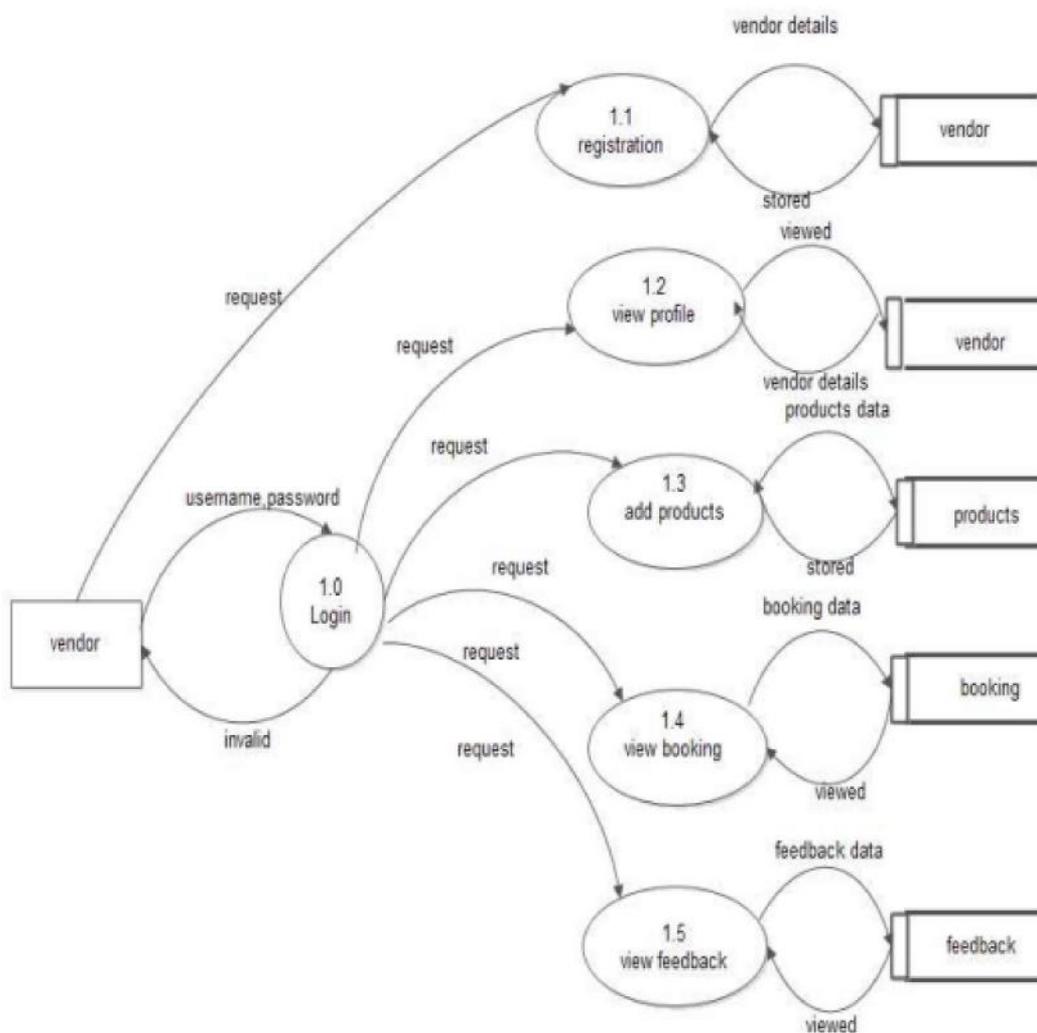
PREDICTING HOUSE PRICE MASTER



Level1 . User



Level1. Venders



3.3 Data Dictionary

A data dictionary contains metadata. The data dictionary is very important as it contains information such as what is in the database, who is allowed to access it, where is the database physically stored etc. The users of the database normally don't interact with the data dictionary, it is only handled by the database administrators.

3.4 Database Design

A database is a collection of interrelated data stored with minimum redundancy to serve many users quickly and efficiently. The general objective is to make information access easy, quick, inexpensive and flexible for users. The general theme behind a database is to integrate all information. Database design is recognized as a standard of management information system and is available virtually for every computer system. In database design several specific objectives are considered:

- Ease of learning and use
- Controlled redundancy
- Data independence
- More information at low cost
- Accuracy and integrity
- Recovery from failure
- Privacy and security

Table Name : account

Description: To store the user registration details.

Primary key: email

	Field	Type	Collation	Attributes	Null	Default	Extra	Action						
<input type="checkbox"/>	<u>email</u>	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	paesword	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	address	varchar(300)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	location	varchar(300)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	files	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	religion	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	phone	int(10)			No	None								
<input type="checkbox"/>	family	int(100)			No	None								
<input type="checkbox"/>	senior	int(100)			No	None								
<input type="checkbox"/>	children	int(100)			No	None								

Table Name : custreg

Description: To store the customer registration details.

Primary key: email

PREDICTING HOUSE PRICE MASTER

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	First_Name	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	Last_Name	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	email	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	address	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	location	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	gender	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	password	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	retypepassword	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	cust_id	varchar(100)	latin1_swedish_ci		No	None		      

Table Name : vendreg

Description: To store the Vendor details.

Primary key: email

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	First_Name	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	Last_Name	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	email	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	address	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	location	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	gender	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	password	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	retypepassword	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	vend_id	varchar(100)	latin1_swedish_ci		No	None		      

Table Name : gustreg

Description: To store the guest details.

Primary key: email

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	email	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	password	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	retypepassword	varchar(50)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	gust_id	varchar(100)	latin1_swedish_ci		No	None		      

Table Name : login

Description: To store the login details.

Primary key: email

	Field	Type	Collation	Attributes	Null	Default	Extra	Action
<input type="checkbox"/>	id	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	password	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	role	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	email	varchar(100)	latin1_swedish_ci		No	None		      
<input type="checkbox"/>	First_Name	varchar(100)	latin1_swedish_ci		No	None		      

Table Name : addpro

Description: To store the product details.

Primary key:email, pdt_id

PREDICTING HOUSE PRICE MASTER

	Field	Type	Collation	Attributes	Null	Default	Extra	Action							
<input type="checkbox"/>	pdtname	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdttype	varchar(50)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	description	varchar(300)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	startdate	date			No	None									
<input type="checkbox"/>	enddate	date			No	None									
<input type="checkbox"/>	files	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	location	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	email	varchar(50)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	password	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	phno	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdt_id	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	price	int(11)			No	None									
<input type="checkbox"/>	time	varchar(50)	latin1_swedish_ci		No	None									

Table Name: booking

Description: To store the booking details.

Primary key: email, pdt_id

	Field	Type	Collation	Attributes	Null	Default	Extra	Action							
<input type="checkbox"/>	email	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	password	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdt_type	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdt_id	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	start_date	date			No	None									
<input type="checkbox"/>	end_date	date			No	None									
<input type="checkbox"/>	price	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	day	int(30)			No	None									

Table Name: checkout

Description: To store the checkout product details.

Primary key: email, pdt_id

	Field	Type	Collation	Attributes	Null	Default	Extra	Action							
<input type="checkbox"/>	email	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	password	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdt_type	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	pdt_id	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	price	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	start_date	date			No	None									
<input type="checkbox"/>	end_date	date			No	None									
<input type="checkbox"/>	files	varchar(100)	latin1_swedish_ci		No	None									
<input type="checkbox"/>	day	int(30)			No	None									
<input type="checkbox"/>	paid	varchar(100)	latin1_swedish_ci		No	None									

Table Name: delivery

Description: To store the delivery and payment details.

Primary key: email,

PREDICTING HOUSE PRICE MASTER

	Field	Type	Collation	Attributes	Null	Default	Extra	Action						
<input type="checkbox"/>	card	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	name	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	address	varchar(300)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	email	varchar(50)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	phno	int(10)			No	None								
<input type="checkbox"/>	amount	varchar(100)	latin1_swedish_ci		No	None								

Table Name: contact

Description: To store the contact or feedback details.

Primary key: email

	Field	Type	Collation	Attributes	Null	Default	Extra	Action						
<input type="checkbox"/>	email	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	password	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	phno	varchar(100)	latin1_swedish_ci		No	None								
<input type="checkbox"/>	subject	varchar(300)	latin1_swedish_ci		No	None								

4. SYSTEM DEVELOPMENT

4.1 MODULE DESCRIPTION

- ❖ Registration
- ❖ Advertise product
- ❖ Data base maintenance
- ❖ Searching and booking the product
- ❖ Location based searching
- ❖ Verify Bookings and Intimate to Vendor
- ❖ Authentication
- ❖ Renewal alert
- ❖ Login
- ❖ Smarts advertise

1. Vendor Registration:

The Vendor fills the registration form by giving the personal information and successfully registers with the website.

2. Advertise Products:

After entering into vendor's homepage vendor will advertise his products by filling add product form by providing sufficient details about product such as product id, available dates, rent etc.and upload the image of that product. It consists of following sub modules:

- I. Update Product
- II. Delete Product

❖ Update Product:

Vendor can update the existing product details such as rent, available dates etc. by entering the product id of that product.

❖ Delete Product:

Vendor can delete his products by entering the product id of the existing product.

3. Data base maintenance:

The data provided by the Vendors such as product details, personal details, etc and data provided by the customer such as feedback and booking details will be maintained in a data base by the website administrator.

4. Searching and booking the products:

The Customer after accessing the site he searches for products, if he finds the required product then he needs to fill the booking form and submit to the database.

5. Verify Bookings and Intimate to Vendor:

The Administrator after Login to the site he verifies for recent bookings from customers. Then he needs to forward all bookings details to the Vendors.

6. Location based searching

In this module we can search the item based on our location with the Help of Google map.

7. Authentication:

Authentication is nothing but providing security to the system. Here every must enter the system throw login page. The login page will restrict the UN authorized users. A user must provide his credential like user Id and password for log into the system. For that the system maintains data for all users. Whenever a user enters his user id and password, it checks in the database for user existence. If the user is existing, he can be treated as a valid user. Otherwise, the request will throw back.

8. Renewal Alert

In this module user can get alert from the system for renewal of the rented item.

9. Login

All the users of the system are login through this module only. Thus, security is provided

10. Smarts advertise

The system will show the recently searched items during search.

4.2 SOURCE CODE

```
from django.shortcuts import render
from django.http import HttpResponse,HttpResponseRedirect
```

PREDICTING HOUSE PRICE MASTER

```
import MySQLdb
import random
from django. core. files.storage import FileSystemStorage
from django. views. decorators.cache import cache_control
from django. contrib. auth.decorators import login_required
import smtplib
import urllib. request
import webbrowser
from django. contrib import messages
from datetime import date
from datetime import datetime
import datetime
import csv
import os
import time
def sendmail (toadd, msg):
#Create smtp session
s = smtplib. SMTP('smtp.gmail.com',587)
#Start TLS for security
s. starttls ()
#Authentication
s.login("domiorentalportofficial@gmail.com","domio123456")
#Message you need to be send
#Sending the mail
s. sendmail("domiorentalportofficial@gmail.com", toadd,msg)
#Terminating the session
s. quit ()
def sendsms (ph, msg):
sendToPhoneNumber= "+91"+ph
userid = "2000022557"
passwd = "54321@lcc"
url = "http://enterprise.msgupshup.com/GatewayAPI/rest?method=sendMessage&send_to=" +
sendToPhoneNumber + "&msg=" + msg + "&userid=" + userid + "&password=" + passwd +
"&v=1.1&msg_type=TEXT&auth_scheme=PLAIN"
# contents = urllib. request. urlopen(url)
webbrowser. open(url)
# Create your views here.
con=MySQLdb.connect("localhost","root","","House_Price_Predict")
c=con. cursor ()
@Cache_control (no_cache=True, must_revalidate=True)
@login_required(login_url='/login/')
def usrhome(request):
uid=request. session["uname"]
print(uid)
search=request.POST.get("search")
if request.POST.get("b1"):
s="select * from addpro where description like '%" +search+"%"
c.execute(s)
data=c. fetchall ()
print(s)
s="select count (*) from addpro where email='"+str(uid)+"'"
c.execute(s)
data1 = c. fetchone ()
print(data1)
```

PREDICTING HOUSE PRICE MASTER

```
paid="not paid"
l="select * from checkout where id='"+str(uid)+"'and paid='"+str(paid)+"'"
c.execute(l)
data3=c.fetchall()
y="select files from account where email='"+str(uid)+"'"
c.execute(y)
data5=c.fetchone()
return render (request,"usrhome.html",
{"uid":uid,"data":data,"data1":data1,"data3":data3,"data5":data5})
def register(request):
return render(request,"register.html")
def vendorreg(request):
vend_id=random. randrange (10000,1000000,3)
role="Vendor"
alert=" "
if "b1" in request.POST:
print("*****pppppppppppppppppppp*****")
**
*****")
first_name=request.POST.get("t1")
last_name=request.POST.get("t2")
email=request.POST.get("t3")
Address=request.POST.get("t4")
location=request.POST.get("t5")
gender=request.POST.get("r1")
password=request.POST.get("t6")
retypepassword=request.POST.get("t7")
ss="select count (*) from vendreg where email='"+str(email)+"'"
c.execute(ss)
s=c. fetchone ()
print(s)
if (s [0]==0):
s="insert into vendreg
('First_Name`,`Last_Name`,`email`,`address`,`location`,`gender`,`password`,`retypepassword`,`vend_
id
`)
values('"+first_name+"','"+last_name+"','"+email+"','"+Address+"','"+location+"','"+str(gender)+"','"+
pa
ssword+"','"+retypepassword+"','"+str(vend_id)+"')")
c.execute(s)
con. commit ()
print ("*****")
print ("insert into vendreg
values('"+first_name+"','"+last_name+"','"+email+"','"+Address+"','"+location+"','"+str(gender)+"','"+
pa
ssword+"','"+retypepassword+"','"+str(vend_id) +')")
log="insert into login values('"+str(vend_id)
+",'"+password+"','"+str(role)+"','"+str(email)+"','"+str(first_name) +','',registered')")
c.execute(log)
con. commit ()
return HttpResponseRedirect("/usrlogin")
else:
alert="Invalid Username or Password"
return render (request,"vendorreg.html", {"vend_id":vend_id,"alert":alert})
```

PREDICTING HOUSE PRICE MASTER

```
def customerreg(request):
    cust_id=random. randrange (10000,1000000,3)
    role="Customer"
    if request.POST.get("b1"):
        first_name=request.POST.get("t1")
        last_name=request.POST.get("t2")
        email=request.POST.get("t3")
        Address=request.POST.get("t4")
        location=request.POST.get("t5")
        gender=request.POST.get("r1")
        password=request.POST.get("t6")
        retypepassword=request.POST.get("t7")
        s="insert into custreg
        values('"+first_name+"','"+last_name+"','"+email+"','"+Address+"','"+location+"','"+str(gender)+"','"+
        pa
        ssword+"','"+retypepassword+"','"+str(cust_id) +'"")
        c.execute(s)
        con. commit ()
        log="insert into login values('"+str(cust_id)
        +"'','"+password+"','"+str(role)+"','"+str(email)+"','"+str(first_name) +"'','approved')"
        c.execute(log)
        con. commit ()
        return HttpResponseRedirect("/usrlogin")
        return render (request,"customerreg.html", {"cust_id":cust_id})
    def guest(request):
        gust_id=random. randrange (10000,1000000,3)
        role="Guest"
        first_name="guest"
        if request.POST.get("b1"):
            email=request.POST.get("t1")
            password=request.POST.get("t2")
            retypepassword=request.POST.get("t3")
            s="insert into guestreg values('"+email+"','"+password+"','"+retypepassword+"','"+str(gust_id) +'"")
            c.execute(s)
            con. commit ()
            log="insert into login values('"+str(gust_id)
            +"'','"+password+"','"+str(role)+"','"+str(email)+"','"+str(first_name) +"'','approved')"
            c.execute(log)
            con. commit ()
            return HttpResponseRedirect("/usrlogin")
            return render (request,"guest.html", {"gust_id":gust_id})
        @Cache_control (no_cache=True, must_revalidate=True)
    def usrlogin(request):
        alert=" "
        try:
            if(request.POST.get("b1")):
                username=request.
```

5. SYSTEM TESTING AND IMPLEMENTATION

5.1 TESTING

The term software testing is defined as to find for the errors in the application that might lead to fault or failure of the whole application. There are testing conditions that the system must pass to say that it is tested and working properly. The quality and reliability are also attained by going through the process of testing.

❖ UNIT TESTING

Unit testing is a level of a software testing where individual units/components of software are tested. The purpose is to validate that each unit of the software performs as designed. A unit is the smallest testable part of any software. It usually has one or a few inputs and usually a single output. In procedural programming, a unit may be an individual program, function, procedure, etc. In object-oriented programming, the smallest unit is a method, which may belong to a base/ super class, abstract class or derived/ child class. (Some treat a module of an application as a unit. This is to be discouraged as there will probably be many individual units within that module.) Unit testing frameworks, drivers, stubs, and mock/ fake objects are used to assist in unit testing.

❖ INTEGRATION TESTING

Integration testing is a level of software testing where individual units are combined and tested as a group. The purpose of the level of testing is to expose faults in the interaction between integrated units. The purpose of this level of testing is to expose faults in the intersection between integrated units. The drivers and test stubs are used to assist in Integration Testing.

❖ SYSTEMS TESTING

System testing is a level of software testing where complete and integrated software is tested. The purpose of this test is to evaluate the system's compliance with the specified requirements.

❖ ACCEPTANCE TESTING

Acceptance testing is performed to ensure that the functional, behavioural, and performance requirements of the software are met. IEEE defines acceptance testing as a 'formal testing with respect to user needs, requirements, and business processes conducted to determine whether or not a system satisfies the acceptance criteria and to enable the user, customers or other authorized entity to determine whether or not to accept the system.'

During acceptance testing, the software is tested and evaluated by a group of users either at the developer's site or user's site. This enables the users to site. The enables the users to test the software themselves and analyse whether it is meeting

their requirements. To perform acceptance testing, a predetermined set of data is given to the software as input. It is important to know the expected output before performing acceptance testing so that outputs produced by the software as a result of testing can be compared with them. Based on the results of tests, users decide whether to accept or reject the software is correct and is accepted; otherwise, it is rejected.

❖ REGRESSION TESTING

Regression testing is the retesting of a software system to confirm that changes made to few parts of the codes has not any side effects on existing system functionalities. It is to ensure that old codes are still working as they were before introduction of the new change. The ideal process would be to create an extensive test suite and run it after each and every change.

5.2 VALIDATION CHECKS

A validation check ascertains that the value (or data) input into a computer is valid. Validation checks are performed automatically by computer to ensure that entered data is correct and reasonable. Validation means check the input submitted by the user. There are two types of validation are available in PHP. They are as follows –

- **Client-Side Validation** – Validation is performed on the client machine web browsers.
- **Server-Side Validation** – After submitted by data, the data has sent to a server and perform validation checks in server machine.

Server-Side Validation

In the Server-Side Validation, the input submitted by the user is being sent to the server and validated using one of server-side scripting languages such as ASP.Net, PHP etc. After the validation process on the Server Side, the feedback is sent back to the client by a new dynamically generated web page. It is better to validate user input on Server Side because you can protect against the malicious users, who can easily bypass your Client-Side scripting language and submit dangerous input to the server.

Client-Side Validation

In the Client-Side Validation, you can provide a better user experience by responding quickly at the browser level. When you perform a Client-Side Validation, all the user inputs validated in the user's browser itself. Client-Side validation does not require a round trip to the server, so the network traffic which will help your server perform better. This type of validation is done on the browser

side using script languages such as JavaScript, VBScript or HTML5 attributes.

5.3 IMPLEMENTATION

Implementation includes placing the system into operation and providing the users and operation personnel with the necessary documentation to use and maintain the new system. Implementation includes all those activities that take place to convert from the old system. Proper implementation is essential to provide a reliable system to meet the organizational requirements. Successful implementation may not guarantee improvement in the organization using the new system, as well as improper installation will prevent. There are four methods,

- **Parallel approach:** The old system is operated with the new system.
- **Direct cut over method:** The old system is replaced with the new system.
- **Pilot approach:** Working version of the system is implemented in one part of the organization based on the feedback, changes are made, and the system is installed in the rest of the organization by one of the other methods.
- **Phase-in-method:** Gradually implements the system across all users.

5.4 SECURITY

The protection of computer-based resources that includes hardware, software, data, procedures and against unauthorized use or natural.

- Integrity
- Privacy
- Disaster is known as system security.
- System security can be divided into four related issues.
- Confidentiality
- Security

Data security is the protection of data from loss, disclosure, modification and Destruction

System Integrity refers to the proper functioning of hardware and programs, appropriate physical security, and safety against external threats such as eavesdropping and wiretapping.

5.5 SCOPE FOR FUTURE ENHANCEMENT

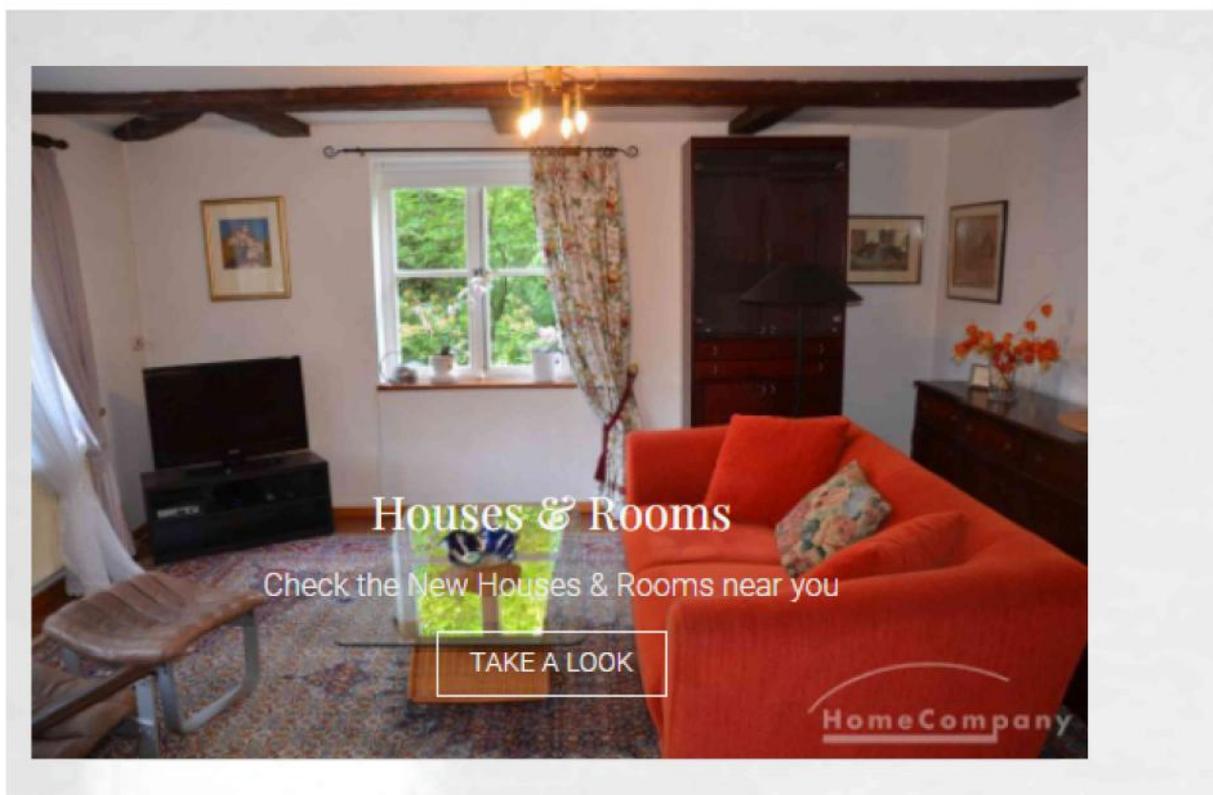
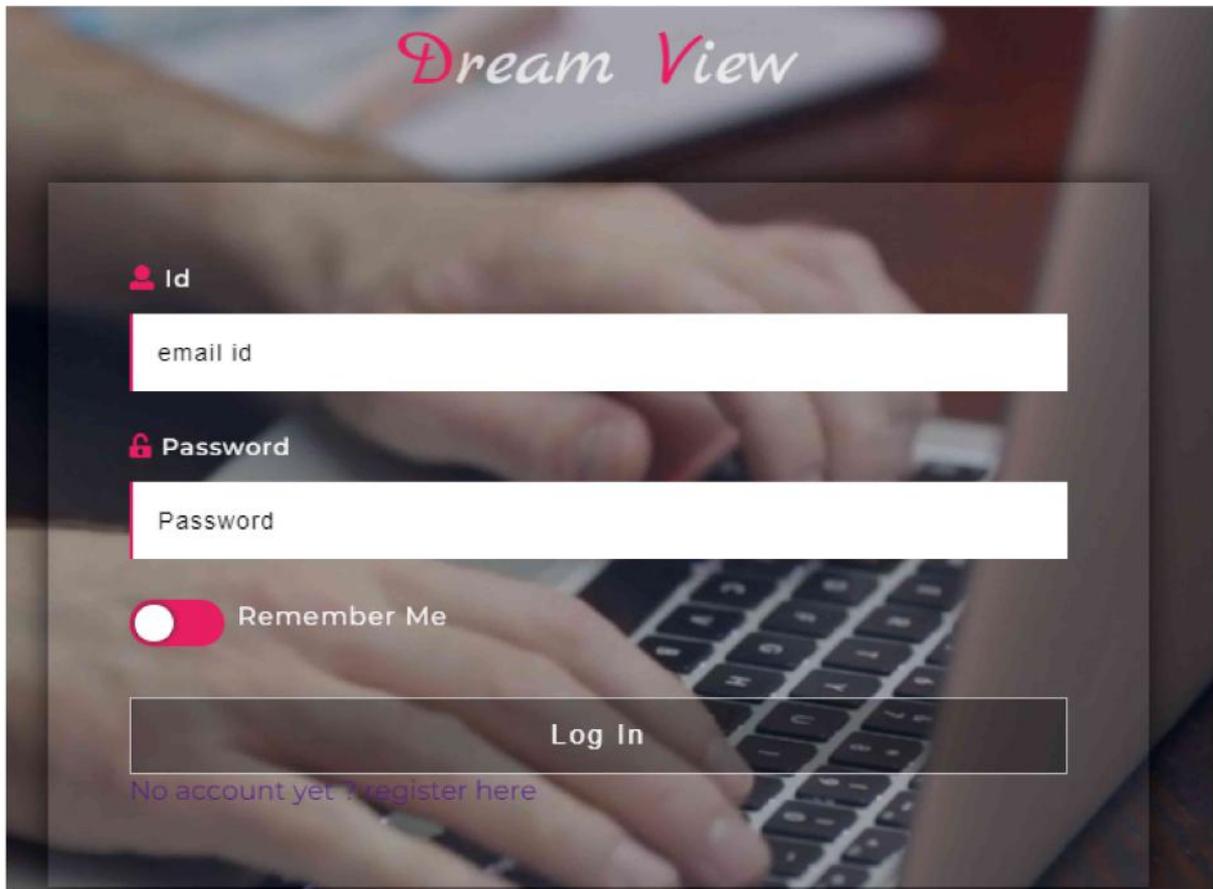
The software is developed in visual basic which makes the system more reliable and compatible with other environments. The application proves better extensibility and flexibility for future enhancements. Any further requirement application is possible with the same feature guaranteed. It is a user –friendly system, which is very easy and convenient to use. The system is complete in the sense that it is operational, and it is tested by entering data and getting reports in proper order. During the development of this project coding standards are followed for easy maintainability and extensibility. Though the new system provides a base for improving the efficiency of operations, there are lots of further enhancement that can be added to this project. Keeping this in view, provision has been made in the system to facilitate easy modification updating in future. Any modification will not affect the normal working of the system. The developed system is very interactive, coded in such a way to ensure maximum user friendliness and allows flexibility for future. The system developed automates most needed activities in an organization. The new system can be combined with an existing system as well. More and better advanced separation system can be built on top of the proposed system as and when the need arises. This is one of the main special features of the proposed system.

6. CONCLUSION

CONCLUSION

In this paper, the Decision tree machine learning algorithm is used to construct a prediction model to predict potential selling prices for any real estate property. Additional features like air quality and crime rate were included in the dataset to help predict the prices even better. These features are not mostly included in the datasets of other prediction systems, which makes this system different. These features influence people's decision while purchasing a property, so why not include it in predicting house prices. The trained model is integrated with the User Interface using the Flask Framework. The system provides 89% accuracy while predicting the prices for the real estate prices.

7. APPENDIX



		
PRODUCT ID:305	PRODUCT ID:170	PRODUCT ID:885
1 bhk apartment near railway station and city hospital ernakulam	2 bhk apartment near marine drive , childrens park, shopping mall and medical center	house near lulu mall, school,renai school at edappally
Dec. 1, 2019 to Sept. 30, 2020	Dec. 24, 2019 to May 26, 2020	Dec. 1, 2019 to Dec. 1, 2020
Price:1200	Price:1000	Price:1000
add to cart	add to cart	add to cart

ADD HOUSE

House name:	
House type	None ▼
Description	
Starting Date	dd-mm-yyyy 📅
Ending Date	dd-mm-yyyy 📅
Choose File	No file chosen
<div style="border: 1px solid #ccc; height: 200px; width: 100%;"></div>	
Location:	
Rent per day	
revathytv2001@gmail.com	
.....	

UPDATE PRODUCT

Product Name:

House type None ▼

Description

Availbilty

dd-mm-yyyy starting_Date

dd-mm-yyyy ending_Date

Choose File No file chosen

Location:

Price

Revathytv2001@Gmail.Com

pdtname	pdtype	description	startdate	enddate	files
		capaci...			
flat	House & Rooms	3bhk apartment near railway station and city hopit...	2019-12-01	2020-09-30	3_bhk_apartment-for-rent-hsr_layout_bangalore-Bang...
apartment	House & Rooms	2 bhk apartment near marine drive , childrens park...	2019-12-24	2020-05-26	45b0cdf193f178d675391d4095b5ef83a77a87cd.jpg

8. BIBLIOGRAPHY

REFERENCES

1. Python - Guido van Rossum
2. HTML - Ivan Barros
3. JavaScript - Ivan Barros
4. CSS - Thomas A. Powell
5. MySQL - Paul DuBois

WEBSITES VISITED

www.google.com
www.w3schools.com
[www.wikipedia.](http://www.wikipedia)

**THE IMPACT OF CRM AND CUSTOMER RETENTION IN
HOSPITALITY INDUSTRY: EVIDENCE FROM 5 STAR
HOTELS IN KERALA**

Project Report

Submitted by

RHEA JOSEPH (Reg. No. SB19BMS021)

Under the guidance of

Ms. ANU. M. JAYASANKAR

In partial fulfilment of the requirements for award of the degree of

**Bachelor of Management Studies - (International
Business)**



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CERTIFICATE

This is to certify that the project entitled "The impact of CRM and Customer Retention in Hospitality Industry: Evidence from 5-star hotels in Kerala, has been successfully completed by Ms. RHEA JOSEPH, Reg. No.SB19BMS021, in partial fulfilment of the requirements for the award of degree of Bachelor of Management Studies in International Business, under my guidance during the academic years 2019-2022.

Date: 25th April 2022



Ms. ANU. M. JAYASANKAR
INTERNAL FACULTY GUIDE

DECLARATION

I, Rhea Joseph, Reg. No.SB19BMS021, hereby declare that this project work entitled “The Impact of CRM and Customer Retention in Hospitality Industry: Evidence from 5 Star hotels in Kerala” is my original work.

I further declare that this report is based on the information collected by me and has not previously been submitted to any other university or academic body.

Date: 25th April 2022

RHEA JOSEPH

Reg. No.SB19BMS021

ACKNOWLEDGEMENT

I would like to place on Project Report my debt of gratitude to those who helped me in the preparation of this project.

I thank Dr. Lizzy Mathew, Principal and Sr. Emeline CSST, Manager, St. Teresa's College Ernakulam for permitting me to take up this opportunity of doing an in-depth study on the impact of CRM and customer retention in hospitality industry: (evidence from 5 - star hotels in Kerala).

I take this opportunity to express my deep sense of gratitude and whole hearted thanks to my mentor Ms. Anu .M. Jayasankar of the department of Management Studies for guiding me in all stages of this project, without whom this project would have been a distant reality.

To all relatives, friends and other who in a way or another shared their support, either morally, financially and physically, thank you.

Rhea Joseph

EXECUTIVE SUMMARY

I am presenting this report on the impact of CRM and customer retention in hospitality industry: evidence from 5- star hotels in Kerala.

The customers are very important factors in companies' management with the power to change their short- term and long-term policies and strategies. Therefore, enough knowledge of the environment, expectations of the customers and their desires are very important to find the best solution for facing unexpected behaviors of customers and then behave in such a way to change the mind of customers in the direction of companies' profit.

It's an art to absorb customers by using different techniques such as CRM in order to manipulate companies' policies ahead of them.

The report starts with an objective, a brief introduction of CRM and covers data analysis, findings, discussions and a wide variety of topics, such as customer satisfaction, loyalty, customer value etc.

The basic objective is to identify the impact of CRM and customer retention in hospitality industry.

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CHAPTER 1:
INDRODUCTION TO STUDY

1.1 Introduction to the Study

The attention on a sustainable Customer Relationship Management (CRM) has been getting magnified in recent times. The concept that long-term associations are more profitable than short-term transactional relationships has changed and steadied within the organizational philosophies. Knox et al. (2007) have viewed customer relationship management as an organization-wide process of treating diverse clients differently to increase worth for both client and organization. Ryals and Knox (2007) have acknowledged CRM as identifying, satisfying, keeping and maximizing the most precious customers.

More specifically, CRM is regarded as one of the best strategies and practices for hotels in order to develop their performance and thus to make sure that their long-term business is survival (Wu & Lu, 2012). It is worth mentioning that CRM is mainly based on the belief that establishing long-term relationships with customers is critical for obtaining loyal customers who are much more profitable than non-loyal ones (Dowling, 2002). Though previous studies confirm the positive effects of CRM on business performance, actual results in the business world remain controversial regarding the real outcomes of CRM and its effects on businesses investing in it (Payant 2004; Rigby, Reichheld, and Schefter 2002).

In this regard, the successful implementation of CRM strategies will be of great benefit to the organizations, investing in it. Such organizations can reap the benefit of increasing sales and ensuring long-lasting customer retention and loyalty (Verma and Chandhuri, 2009).

In Kerala, hotels operate in a business environment that is illustrated by strong competition, making it vulnerable to international competition. It has always been dominated by domestic players, individual/family run hotels and the taj properties. There are only few international players. This also reveals that hotel managers need to use an appropriate strategy and practice to develop their performance. Consequently, to develop both customer satisfaction and to improve profitability, hotels must nowadays emphasize on implementing a CRM strategy in appropriate manners (Mohammed et al., 2014). However, in spite of the wide use of CRM in the organizations, there have been only limited studies and publications within the hotels sector.

This research paper tends to bring attention to the application CRM in the hospitality industry. It examines the direct outcomes of the CRM activities on 5-star hotels customers' satisfaction in Kerala.

1.2 Statement of the Problem

To enhance profitability and guest satisfaction and loyalty, the organizations (hotels) should focus on implementing Customer Relationship Management (CRM) strategies that aim to seek, gather and store the right information, validate and share it throughout the organization. Hotel industry is a highly flourishing, lucrative and competitive market.

To compete in such a market, the hotels should focus on maintaining good relations with the customers and satisfying the customers. Organizations have discovered research studies which have shown that retaining current customers is much less expensive than attracting new ones. Proper CRM practices can potentially impact customer satisfaction and can potentially lead to increased customer retention, thereby increasing customer loyalty.

1.3 Literature Review

1.3.1 Customer Retention

CRM dimensions evaluation was assessed in a number of ways, including customer satisfaction (Abdulateef et al., 2010), market effectiveness and financial performance (Sin et al., 2005), customer performance and financial performance (Akroush et al., 2011), and customer retention and sales growth (Yim et al., 2005). The use of other dimensions of performance is beneficial as suggested by previous studies (Sin et al., 2005). Customer retention is extremely vital for business to remain competitive. It has recently become more significant compared to customer acquisition. According to research conducted by Maxham (2000), customer retention had been measured by four dimensions, that is, overall firm satisfaction; positive words of mouth; repeat purchase intentions; and loyalty to the firm. In a later study by Lin and Wu (2011), it has been proved that there exists a statistically significant relationship between quality commitment, trust and satisfaction and customer retention and future use of product.

Customer retention is more than giving the customer what they expect; it is about exceeding their expectations so that they become loyal advocates for the brand. Research by Fleming and Asplundh, (Feb.2009) indicates that engaged customers generate 1.7 times more revenue than normal customers, while having engaged employees and engaged customers returns a revenue gain of 3.4 times the norm. Customer retention refers to keeping a customer rather than have the customer use competitors' services or products. Businesses want to reduce customer defections to their competitors because a reduction in their market share and profits could result in a collapse of the organization.

Customer service retention is a popular marketing strategy as it involves focusing on meeting or exceeding customer's expectations in order to maintain their loyalty. When people feel loyal to a certain brand or business, they are less likely to be persuaded by a competitor's adverts and offers.

1.3.2 Customer Satisfaction

Customer satisfaction may be defined as the extent to which a firm fulfils a customer's needs and desires in relation to his expectations, prior to receiving the products or service (McCarthy and Perrault, 2002). Thus, customer expectation is the difference between the expectations of the customers before receiving the services and perceptions of the customers after receiving the services. Customer satisfaction mainly depends on the build-up of the perceived value to which the customers have concerning a product or service (Kotler and Armstrong, 2004; 2009). So, customers' satisfaction can reflect a person's feeling of pleasure or disappointment resulting from comparing a product's perceived performance or outcome in relation to the expectations. As per Liu and Yen (2010) Customer satisfaction is regarded as customers can get more benefits than their cost. Customer satisfaction is attaining the maximum out of the value invested for a product or a service.

Fournier and Glenmick (1991) concluded that the concept of satisfaction holds well only when the expectation is positive. Expectations from the customer's point of view are the reference points on which a customer forms a judgement about a service or a product. Customer satisfaction starts with the first contact an organization has with a customer and continues throughout the entire lifetime of the relationship i.e. the guest cycle (Reicheld, 1996). Customer satisfaction plays the most important role in total quality management. So, for a hotel to carry on in business, it must ensure the satisfaction of needs and wants of the customers continuously, which will eventually lead to a strong customer base.

The hotel industry is a customer bound service and for hotel industries to market themselves as brands it is very important to be customer centric and make sure that their customers get the best of the values. The hospitality manager to ensure that their customers remain continuously satisfied, they must ensure that customers feel welcomed, courteously and efficiently served in a clean, safe and secured environment with the best quality of products sold at a reasonable price (Jones and Newton, 1997). Customer satisfaction is a business philosophy which tends to the creation of value for customers, anticipating and managing their expectations, and demonstrating ability and responsibility to satisfy their needs. Qualities of service and customer satisfaction are critical factors for success of any business (Gronoos, 1990; Parasuraman et al., 1988). Chamayne (2013) enumerated the strategies that can be used to improve customer satisfaction as listening ears, (i.e. proper customer compliant handling procedure or technique) pricing (adequate and reasonable pricing policy), provision of adequate security and proper satisfaction management, quality service delivery, prompt service delivery, courteous staff, employee training etc. Hotels are increasing their investments to improve service quality and the perceived value for guests so as to achieve better customer satisfaction and loyalty, thus resulting in better relationships with each customer (Jones et al., 2007).

1.3.3 Customer Value

Delivering superior value to customers is important for business success (McDougall and Leveque, 2000; Spiteri and Dion, 2004). The source of superior customer value can be identified from organizational resources and capabilities, such as human resource management, innovation, knowledge management, organizational culture and structure (Mittal and Sheth, 2001; Walter and Jones, 2001; Weinstein and Pohlman, 1998). For hotels to deliver superior customer value, i.e. provide the best quality, best prices, and best service, they should view themselves as value-producing entities (Weinstein and Pohlman, 1998). This requires best practice and of innovative thinking at all levels in the organizations (Knox, 2002), valuable core competencies (Walter et al., 2001), mission, strategy, and systems (Dummond, 2000). Providing superior customer value has a positive impact on stakeholders, i.e. customers (Eggert and Ulaga, 2002; Oh, 1999; Woodruff, 1997), employees, and shareholders (Mittal and Sheth, 2001). Organizations with a strong commitment to delivering of superior customer value would benefit from a supportive corporate culture that focuses on customers expressed and latent needs (Narver et al., 2004).

Superior customer value has been associated with superior financial performance (McDougall and Leveque, 2000); strong customer orientation (Gowan et al., 2001) and customer satisfaction (Eggert and Ulaga, 2002; Oh, 1999; Woodruff, 1997). Satisfied customers are more likely to repurchase the product/services (Baker and Crompton, 2000; Patterson and Spreng, 1997; Oh, 1999), and spread positive word of mouth (Petrick, 2002). In the long-run, organizations that are successful in maintaining delivery of superior value build customer loyalty (McDougall and Leveque, 2000) and customer retention (Flint et al., 1997) both of which drive up shareholder value (Mittal and Sheth, 2001).

1.3.4 CRM Quality

The term relationship marketing was first deployed by Berry (1983), which was based on the idea of retention and long-term relationship with customers. Loyalty programs have been considered as one of the most used approaches to maintain a long-term relationship with customers and to entice them for repeat purchases. The loyalty programs were first introduced by American Airlines in 1981 (Xiong, King, & Hu, 2014) for CRM. Hospitality industry also followed suit and it is also one of the industries which heavily deploys CRM programs to maintain relationships with customers (Berman, 2006; Xiong et al., 2014; Yoo et al., 2011). Some of the notable and most cited works in the area of CRM have been done by Buttle (1999, 2001, 2004, 2009); Chen and Popovich (2003); Grönroos (1997); Payne and Frow (2005, 2006); Frow and Payne (2009); Reinartz, Krafft, and Hoyer (2004); Verhoef (2003); and Winer (2001).

Relationship marketing was suggested as the new paradigm by Grönroos (1997), and argued that 4Ps have dominated the marketing thought for a very long time. Buttle (1999) also furthered the idea and reasoned that marketer need to shift their focus from the conventional transaction-based approach to relationship-driven approach. Thereafter, the concept of customer portfolio analysis was pioneered by Buttle (2001), who stated that not all customers have equal value for the company; instead, an organization must focus on strategically significant customers. Payne and Frow (2005) argued that CRM is usually viewed as a tactical technology solution and not seen as

a customer-centric strategy. Therefore, they suggested that CRM must be seen from a strategic vision which aims at understanding the nature of customer value.

1.3.5 Customer Loyalty

Bloemer & Kasper (1995), stated that the loyalty means repetition of the purchasing where there was no any existence of such commitment between purchaser and seller. According to Gremler & Brown (1996), whenever the customer is showing his repurchasing behavior about the goods/services from the same provider from him he had purchased and the customer also has his positive attitude about the same provider and he also recommends the goods and services of the same providers to other, he demonstrates the loyalty. Loyalty is created with the passage of time by maintaining the relation of customers with the firm; when firm supply the quality of its goods and services more than the expectations of the customers (Teich, 1997). In order to repurchase, the customer remains attached with the same goods and service providers from him he has already bought and have positive attitude for him as he recommends their products and services to others (Kandampully & Suhartanto, 2000).

The construction Customer loyalty is on both behavioral and attitudinal aspect, while customer retention is of behavioral (Akbar & Parvez, 2009). So, in customer loyalty the both the aspects as are as follows: 1. Customer intention about repurchase the goods and services so it is an attitudinal aspect 2. Whether the customer has his intention to recommend the goods and service to others or otherwise. So, it is a behavioral aspect Customer loyalty stable the relation of organization with the customers and these customers recommend the goods and services of the organization to others (Ou, Shih, Chen & Wang 2011).

According to Kotler et al. (1999) cost of attracting new customer is higher than the cost of maintaining the current customer. In such a competitive atmosphere, company gives more importance to loyal customer for taking competitive edge (Choi & Kim, 2011).

1.4 Significance of study

The organizations are using Customer Relationship Management (CRM) to help boost sales and revenues by focusing on customer retention and customer loyalty. It is through customer loyalty; an organization can prosper. Conducting this study can help the hotels to understand what can be done to increase customer satisfaction, customer retention and customer value thereby, increasing the customer loyalty.

1.5 Scope of Study

The study is conducted in Kochi city. The researcher hopes to collect data from 100+ customers to determine the impact of customer relationship management on the level of customer's value, retention and satisfaction. It also aims to study the impact of CRM on customer loyalty.

1.6 Objectives of Study

The main objectives of the study are:

- To understand the customer value to the Hotels due to CRM.
- To find whether customers are satisfied due to CRM in Hotels.
- To identify customer retention in hotels due to CRM.

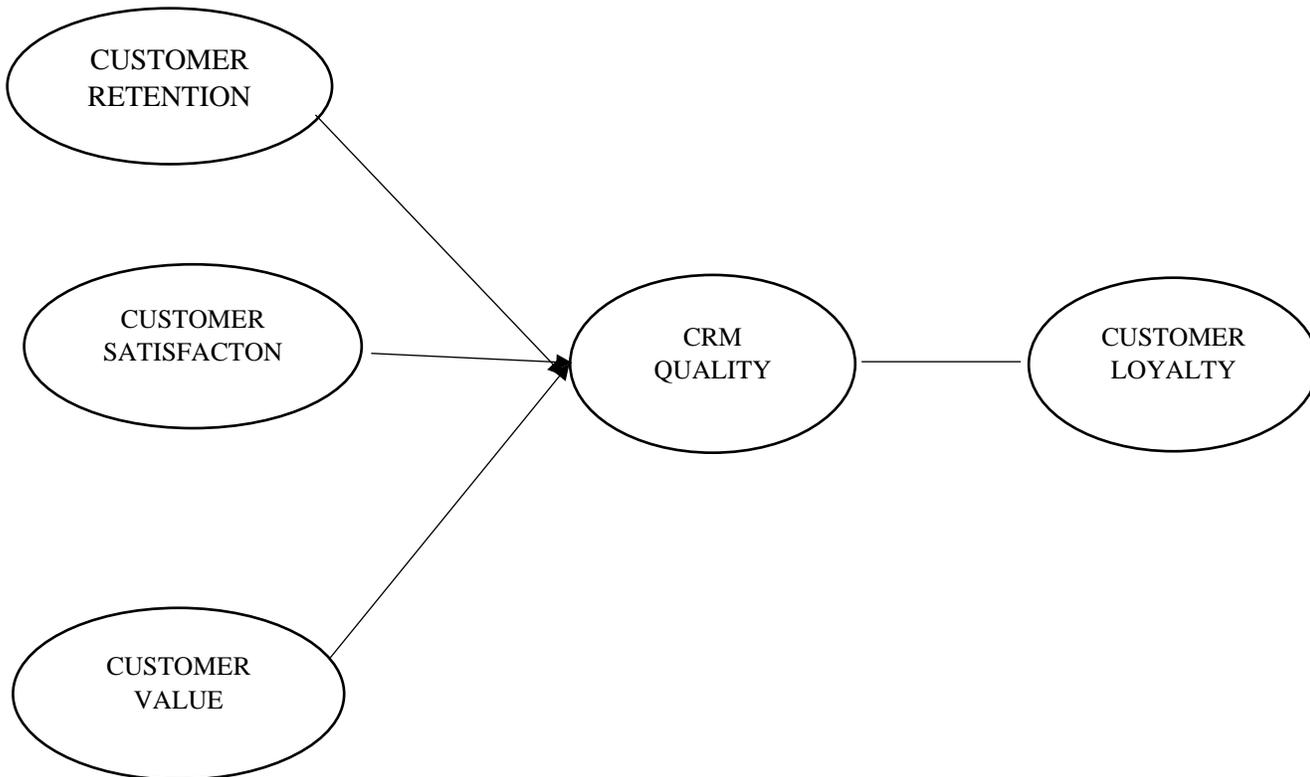
1.7 Research Hypothesis

H1: There is a positive relationship between Customer Relationship Management and customer retention in 5-star Hotel.

H2: There is a positive relationship between customer relationship management and customer satisfaction in 5-star Hotel.

H3: There is a significant relationship between customer relationship management and customer value in 5-star hotel.

1.8 Development of Conceptual Model



1.9 Research Methodology

1.9.1 Data Collection

There are two types of data collection methods; primary data collection and secondary data collection. Primary data is the data which the researcher collects by himself through observation, surveys and questionnaires, interviews etc. Secondary data is the data that is collected by anyone other than the primary user.

The tool used by the researcher for the data collection to understand the impact of CRM and customer retention in hospitality industry, was through questionnaires.

Secondary data in this research was used to find about the industry's profile. It was also used in the introduction of study and literature review. All secondary data related information has been collected from previously done research papers and credible internet websites.

1.9.2 Sampling

1.9.2.1 Population

A population is a distinct group of individuals, whether that group comprises a nation or a by a common feature can be said to be a population.

In this survey, the population comprises of all the customers of 5-star hotels in Kerala.

1.9.2.2 Sample Size

The sample group of people with a common characteristic. Thus, any selection of individuals grouped together for the research is confined to 5-star hotels in Kochi. Keeping in view the limitation of time and resources, the sample size taken is 100+ respondents. Questionnaires were distributed to the respondents and enough time was given to fill questionnaire to reduce sampling errors. The questionnaire was distributed through social media platforms like WhatsApp, Instagram and emails to the respondents.

1.9.2.3 Sampling Techniques

There are two types of sampling techniques; Probability and Non-Probability sampling techniques. Probability sampling refers to the selection of a sample from a population, when this selection is based on the principle of randomization, that is, random selection or chance. The various kinds of probability sampling techniques are Simple random, Systematic, Stratified random sampling and cluster sampling. Non-Probability sampling is a method of selecting units from a population using a subjective, that is, Non-random selection. The various kinds of non-probability sampling techniques are convenience, purposive, quota and snowball sampling.

This research uses convenience sampling techniques which is a type of non- probability sampling technique. It involves selecting the sample population from a pool of conveniently available respondents.

1.9.3 Tools used for data collection

The questionnaire is carefully designed to meet the requirements of the research. Most of the questions are constructed using Likert scale ranging from 1- Strongly Disagree, 2- Disagree, 3- Neither Agree nor Disagree, 4- Agree, 5- Strongly Agree. There are also nominal scale questions.

1.9.4 Data Analysis techniques

The entire data has been analyzed using SPSS software package. The tool which is used for this analysis is Correlation and Percentage analysis.

1.10 Limitations of the Study

- a) There could be some factors which affects the repurchase behavior such as the hotel charges.
- b) Questions in the questionnaire are limited in number to encourage high response.

CHAPTER 2:
INDUSTRY AND SERVICE PROFILE

Industry Profile

Travel is often considered everyone's favorite pastime. Thus, it is no wonder that many consider the hospitality industry to be one of the world's biggest industries. It is estimated that 1 in 10 jobs worldwide is a part of the hospitality industry. The hospitality industry is composed of several smaller industries: lodging, food service, and travel-related recreation. Hotels, motels, resorts, inns, and bed and breakfasts make up most of the lodging or accommodation industry.

The food service industry is diverse and is often classified into Quick Service, Casual, Full Service, On-site Foodservice (contract), Private Clubs, Bars and Beverage Management, Catering, and Event Management. Gaming or casinos are often considered a component of the hospitality industry where they intersect with hotels and restaurants. The hospitality industry is very diverse: from small mom and pop diners to large multi-thousand hotel room complexes. The industry is located throughout the world in many facets, structures, and designs. But the hospitality industry is more than just a place to stay or a meal to eat. It often serves as the hub of a community. Restaurants and hotels serve as a center for commodities, capital, and information. People gather at hotels and restaurants in pursuit of commerce, conversation, and culture. Conrad Hilton believed hotels and restaurants become the "focal point for the exchange of knowledge between millions of people who have come there because they want to know each other better, trade with each other and live with each other in peace." As economies and communities develop, hotels and restaurants play a vital role beyond the provision of beds and meals. The hospitality industry contributes to a community's economic, social, and cultural development.

The hospitality industry has often been charged with helping to facilitate a global economy, often known as an ambassador to the community or country. Many believe that international travel can help establish world peace. In the years following World War II, several hotel companies were recruited to build hotels internationally as part of the "good neighbor policy." Hilton Hotels developed a corporate motto during that era that reflected the view of many: "World Peace through International trade and travel." Conrad Hilton believed in this philosophy of establishing world peace by increasing international trade by opening hotels in many international cities. InterContinental Hotels was formed to help facilitate world trade with the belief that world peace could be achieved by enriching and strengthening economies of smaller countries throughout Latin America and the rest of the globe, thereby lessening the appeal of dominant countries and further world wars. The hospitality industry has helped to unite warring factions in other countries such as Guatemala and India. The hospitality industry is complex, with many structures and processes. The industry is diverse in its history, with chronicles of many different key players.

The hospitality industry is composed of many small businesses as well as several large multinational businesses. There are many independent hotels and restaurants with varying affiliations. In contrast, acquisitions and mergers have been abundant in the hospitality industry, resulting in a small number of large multinational companies. The hospitality industry has several unique components that set it apart from other industries. Inventory is highly perishable. Service

is as much of the product as the tangible room or meal. As such, the customer is highly woven into the product and service delivery. While brands and large company ownership are prevalent, the majority of the hospitality industry is still owned and operated by individuals. Although not unique to the hospitality industry, labor is a key component of the hospitality product.

2.1.2 History of Indian Hospitality Industry

India stands unmatched with its rich culture and tradition in hospitality, which millions of international and local travelers have experienced over the years. Today's travelers know what they want and are seekers of authentic, immersive experiences. Hotels are at the center of it all. The Indian hotel industry, however, has shifted enormously over the years.

During the 1970s and 1980s, the Indian traveler did not have a decent room to stay in. The only hotels were either poky places with poor hygiene or grand five-stars run by the likes of the Taj or the Oberoi, which were unaffordable. So, there was nowhere decent and affordable for the large middle-class of this country. As a result, most travelers opted to stay with families and friends or in state-run tourist homes.

Till the early 1990s, the structure of India's hotel industry was fairly straightforward. There was an owner, there was a manager and the brand. But in the majority of cases, the hotel owner simply ran the hotel without a brand. The Indian economy opened up in 1991, leading to high economic growth in the country all through the 1990s and the noughties. Breaking out of the shackles of socialism, India introduced policies that were market and services-oriented and this led to a boom of seeing good midmarket hotels that offered some of the frills of the five stars.

The Badshah's of Indian hospitality, the Taj, the ITC and the Oberoi often called the Big Three, have dominated the landscape for decades, with the over 100-year-old Taj having a significant market share in the branded hotel segment. The Taj and Oberoi are iconic global brands, but their names no longer command the premium and undying loyalty they once did. Instead, post-2000, each of these players has had to work hard to stay relevant in a world where the customer has plenty of choice and is fickle.

They came, they saw, they failed to conquer that was in the 1960s, and then again in the 1970s and 1980s. But if anything, international chains have been persistent in their attempts to occupy the Indian market. And eventually, most of them managed to crack the code. The entry of the international chains has been a really important turning point for Indian hospitality because while the complexity of the Indian market may have challenged them initially, once they got their bearings right, they brought in some important ingredients that is; discipline, efficiency, transparency and strong processes to the sector.

Today, there are five-and-a-half hotel models—OLMFD (Owned, Leased, Managed, Franchised or Distributed). Many hotels are actually not owned but leased for ninety-nine years or less. When they enter into these leases, people assume the lease will be extended for eternity but that's not the case as seen with the Taj Mahal Hotel on Mansingh Road in New Delhi.

2.1.3 Indian Hospitality Industry and Economic Growth

The hospitality industry in India has been scoring a moderate growth number from the past few years and has great potential to score an even greater number in the future. The nation which is rich in culture and diversity has been attracting a large number of tourists from all over the globe. India has also been recognized as a destination for spiritual tourism for international and domestic tourists. India is showing continuous growth in position moving from 65th in 2013 to 34th position in 2019 in the World Economic Forum's travel and tourism competitiveness index. On the other side, the consistently growing middle class, rising levels of their disposable income, increasing interest among millennials to travel in their home country are a few major reasons that are making the domestic travel industry a profitable one.

The hospitality and tourism industry has been witnessing a healthy growth number and accounted for 7.5% of the GDP. India is a part of the top 100 clubs on Ease of Doing Business (EoDB) and ranks 1st in the greenfield FDI ranking globally and to strengthen the cruise tourism sector, the Government of India (GoI) has selected Chennai, Goa, Kochi, Mangalore, and Mumbai ports to develop them as cruise tourism hubs. These terminals will have facilities like hospitality, retail, shopping, and restaurants.

2.1.4 Market size of Hospitality Industry in India

India is the most digitally advanced traveler nation in terms of digital tools being used for planning, booking, and experiencing a journey. India's rising middle class and increasing disposable income has supported the growth of domestic and outbound tourism.

By 2028, Indian tourism and hospitality is expected to earn US\$ 50.9 billion as visitor exports compared with US\$ 28.9 billion in 2018.

The travel market in India is projected to reach US\$ 125 billion by FY27 from an estimated US\$ 75 billion in FY20.

The Indian hotel market including domestic, inbound and outbound was estimated at ~US\$ 32 billion in FY20 and is expected to reach ~US\$ 52 billion by FY27, driven by the surging demand from travelers and sustained efforts of travel agents to boost the market.

2.1.5 Recent Trends in Hospitality Industry

2.1.5.1 Bleisure Travelers & Hotel Work Spaces

Working remotely has today become commonplace for many employees and is forecasted to become more than just a passing trend. A shift accelerated by the global public health crisis, an

unprecedented number of high-profile companies with big tech companies like Twitter, Facebook, and Amazon leading the way announced that they will adopt a hybrid or flexible approach to working remotely. This means that hospitality venues are being used as make-shift offices for bleisure travelers, as well as locals seeking a change of work environment.

2.1.5.2 Holistic Hospitality, Health & Well-being

Preventative medicine and self-care are undisputedly trending right now due to the COVID pandemic. The wellness industry is transforming into a booming trillion-dollar market. In addition to the usual beauty and relaxation spa offering, there is rapidly growing demand for health diagnostic technology and bespoke treatment plans delivered by experts who conduct personal or group sessions to develop vitality, healing, stress management, emotional balance, mindfulness and better sleep.

2.1.5.3 Digitalized guest experiences

Apps are increasingly important in the way hoteliers manage the services they provide to their customers and can now control many aspects of the guest cycle and experience. Needless to say, the trend towards digital and contactless services has gained new momentum since 2020. Traditionally, customer-facing services are being given an overhaul thanks to the more widespread use of technology-assisted options, such as mobile check-in, contactless payments, voice control and biometrics. Consumers who have become accustomed to unlocking their smartphones and laptops using facial and fingerprint recognition will soon come to expect the same convenience in accessing their hotel rooms.

2.1.5.4 Personalization

Today's guests have grown to expect to be recognized and treated as individuals. Establishments are going the extra mile to personally greet their guests. Far beyond simply adding the customer's name to email greetings, data provides insight into past buying habits, enabling hotels to tailor their offers and promotions, and automatically provide similar services to previous stays. Technological platforms such as CRM and CEM use big data to create one-to-one interactions between the guest and the host at scale. AI-powered chatbots have proven to be a customer service asset both during the booking process and in responding to recurring questions.

2.1.5.5 Solo travel

In the age of mindfulness, many have embraced the meditative value of spending time alone and venturing out into the big wide world unencumbered, interacting and making friends to whatever degree suits. In an effort to make solo travelers feel comfortable, barriers between hotel staff and guests are being lowered, interior design choices made to evoke a sense of homeliness and an informal atmosphere cultivated. This, along with a less stark divide between guests and locals, encourages a feeling of hotel community.

2.1.5.6 Sustainability

A hospitality trend that is both current and a hallmark of recent years: "Sustainability" once again assumes its position. A natural extension of avoiding disposable plastics, eliminating unnecessary paper consumption thanks to opt-in receipts and reducing food waste, more far-reaching ethical and environmental considerations are shaping decisions made at the hospitality management level.

Simple eco-friendly switches include replacing miniature toiletries with larger, locally sourced dispensers, choosing ethically produced bedsheets made from organic materials and reducing energy consumption with smart bulbs, etc. Vegetarian and vegan options also harbor well-known environmental advantages.

2.1.5.7 Traveling less (& Staycations)

Travel restrictions in 2020 and 2021 have facilitated the rise of the staycation. Even with international travel opening back up, between airline price hikes, Covid testing requirements and the complicated bureaucracy involved in going abroad now, many deem foreign travel either too expensive for a big family vacation or not worth the hassle for the weekend breaks of the past. Hence, opting in favor of the staycation trend instead, or simply travelling much less than pre-pandemic levels. In fact, there is a multitude of reasons vacationers may also be choosing to stay closer to home, such as for environmental or budgeting reasons, with this year having seen a marked uptick in holidays spent more locally. Lucky for those who live in an already tourism-rich, picturesque country with a pleasant climate.

2.1.6 Challenges Faced by Hospitality Industry

2.1.6.1. Implementation of Technology

Over the past year technology has ramped up within the hospitality industry; self-check-ins, contactless service, online ordering and payment via apps has become the new norm. It's a challenge for the industry to provide a good customer experience with a mix of human and tech-enabled interactions; customers crave experience thus the company must be doing everything they can to adhere to this. Thus, organizations need to have back-up plans in place to be prepared for any issue thrown at them with the world of technology.

2.1.6.2 Reputation Management

Online platforms are becoming increasingly popular every year, with customers giving companies online reviews, through comments, ratings and photos. The hospitality industry has been battling to establish strong relationships with their consumers to increase their reputation.

2.1.6.3. Retaining and Attracting Employees

The hospitality industry is known for high turnover rates, with about one-third of workers quitting their jobs after working for just six months and around 45 percent of workers holding on for an average of two years. The industry is continuing to grow with more employees being expected to be hired every year, thus for companies to remain competitive they need to ensure they have employees with strong qualities, skills and knowledge. Employee expectations are always changing and growing, organizations need to keep up with the latest trends for attracting and retaining employees, which is proving to be an ongoing challenge within the hospitality industry.

2.2 Service Profile

Food and Beverages

The food and beverage sector which is professionally known by its initials as F&B is the largest segment of the hospitality industry. The F&B industry is estimated to provide 50% of all meals eaten in the US today. It comprises of establishments primarily engaged in preparing meals, snacks, and beverages for immediate consumption on and off the premises. When a restaurant is part of a hotel, services it renders can enhance the guest experience by providing excellent food and first-class customer service. It can symbiotically function as part of other businesses, such as in bowling alleys or movie theaters.

i. Travel and Tourism

Travel and tourism deal with services related to moving people from place to place. Buses, cabs, planes, ships, trains and so on are all part of the travel industry. Leisure travel is when a person spends money on lodging, food, and recreation while taking a vacation trip, and business travel is when a person travels for work and spends money on lodging and food. Some people also spend on recreation while on a business travel. The major function of the tourism is to encourage people to travel. When people travel, either for business or leisure, they spend money on hospitality.

ii. Lodging

Lodging means accommodation for a period or a place to sleep for one or more nights. Fancy hotels, youth hostels, elder hostels, campgrounds, motels and other businesses that provide a place for people to sleep overnight are all in the lodging industry. Lodging businesses markets to other market segments such as business travelers, leisure travelers, long-stay travelers, budget travelers, and special travelers like people working with the government, airlines, and military.

iii. Recreation

Recreation is any activity that people do for rest, relaxation, and enjoyment. The goal of recreation is to refresh a person's body and mind. Any business that provides activities for rest, relaxation and enjoyment, to refresh a person's body and mind is in the recreation business. Entertainment businesses which provide shows such as movie or theater, attractions which are places of special interest of visits such as zoos and museums, spectator sports and participatory sports are all parts of the recreation business.

**CHAPTER 3:
DATA ANALYSIS AND
INTERPRETATION**

In this chapter of analysis, data collection and findings of the study are discussed, the descriptive information and statistical analysis produced by the collected survey are shown. Records are statistically analyzed with SPSS software programme.

3.1 Demographic Details of Respondents

The researcher has tried to study the demographic variables of the respondents.

Table 3.1(a)- *Demographic Details of Respondents*

	Demographic Characteristics	Number of Respondents	Percentage
Gender	Female	58	57.4%
	Male	38	37.6%
	Prefer not to say	5	5%
		101	100%
Age	> 20 years	21	20.8%
	21-30 years	35	34.7%
	31-40 years	23	22.8%
	41-50 years	22	21.8%
		101	100%
Occupation	Student	43	42.6%
	Employee/Employer	42	41.6%
	Homemaker	7	6.9%
	Retired	9	8.9%
		101	100%
Monthly Income	Less than 50000	47	46.5%
	50000-70000	26	25.7%
	70000-90000	15	14.9%
	More than 90000	13	12.9%
		101	100%

GENDER: According to the demographic profile, 57.45% of the respondents are female, 37.6% of the respondents are male and 5% prefer not to say their gender. The respondents are the 5 – star hotel customers in Kerala. From these groups the total respondents taken for the study is 101. This data is collected through Google Forms- Online survey.

AGE: According to the demographic characteristics, 20.8% are below 20 years, 34.7% are of 21-30 years, 22.8% are of 31-40 years and 21.8% are of 41-50 years. So according to the survey result, it is clear that people of age group 21-30 years are the more frequent customers. This data is collected through Google Forms- Online.

OCCUPATION: Occupation is one of the factors which affects the purchasing power of a person. The study is conducted with 204 respondents from various occupation groups of 4 categories: Student, Employee/Employer, Homemaker, Retired. The data I've collected depicts that 42.6% are students, 41.6% are Employee/Employer, 6.9% are Homemaker and 8.9% are retired. This data is collected through Google Forms- Online Survey.

MONTHLY INCOME: Income is one of the and sensitive demographic variable. 46.5% has an income less than 50000, 25.7% has an income between 50000-70000, 14.9% has an income between 70000-90000 and 12.9% has an income more than 90000. This data is collected through Google Forms- Online Survey.

3.2 Multiple Response analysis for Customer Loyalty of the Customers

Table 3.2(a), 3.2(b), 3.2(c) Table showing customer loyalty of the customers- frequencies

Do you visit a 5-star hotel frequently?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Most Likely	26	25.7	25.7	25.7
Likely	18	17.8	17.8	43.6
Neutral	24	23.8	23.8	67.3
Somewhat Likely	12	11.9	11.9	79.2
Not Likely	21	20.8	20.8	
Total	101	100	100	100

From table 3.2(a), we can infer that 25.7% most likely visit a 5-star hotel, 17.8% chose Likely, 23.8% chose Neutral, 11.9% chose Somewhat likely and 20.8% chose Not likely.

3.2(b) How likely are you recommend the hotel of your choice to your friends or family?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Most Likely	35	34.7	34.7	34.7
Likely	15	14.9	14.9	49.5
Neutral	25	24.8	24.8	74.3
Somewhat Likely	23	22.8	22.8	97.0
Not Likely	3	3.0	3.0	
Total	101	100	100	100

From table 3.2(b), we can infer that 34.7% most likely recommend the hotel of their choice to friends or family, 14.9% Likely, 24.8% Neutral, 22.8% Somewhat likely, and 3.0% chose Not likely.

3.2(c) How likely would you switch your favorite hotel, if a competitor was cheaper?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Most Likely	27	26.7	26.7	26.7
Likely	16	15.8	15.8	42.6
Neutral	29	28.7	28.7	71.3
Somewhat Likely	16	15.8	15.8	87.1
Not Likely	13	12.9	12.9	
Total	101	100	100	100

From table 3.2(c), we can infer that 26.7% most likely switch the hotel their favorite hotel, if a competitor was cheaper, 15.8% Likely, 28.7% Neutral, 15.8% Somewhat likely, and 12.9% chose Not likely.

3.3 DEPENDENCE OF CRM ON CUSTOMER RETENTION WITH THE SERVICE

The hotel industry strives to create an extraordinary experience for guests which encourages them back to an establishment time and again. Nowadays, the hospitality sector is coming up with innovative and strong measures to keep their loyal guests happy. Sustaining customers is not only good for business but also very cost effective. In order to find if there is a positive relationship between CRM and customer retention, correlation analysis is carried out and the graphical representation is also shown. It is shown in table 3.2(a) and 3.2(b). Hence the following hypothesis is proposed.

H1: There is a positive relationship between Customer Relationship Management and Customer Retention in 5-star hotels.

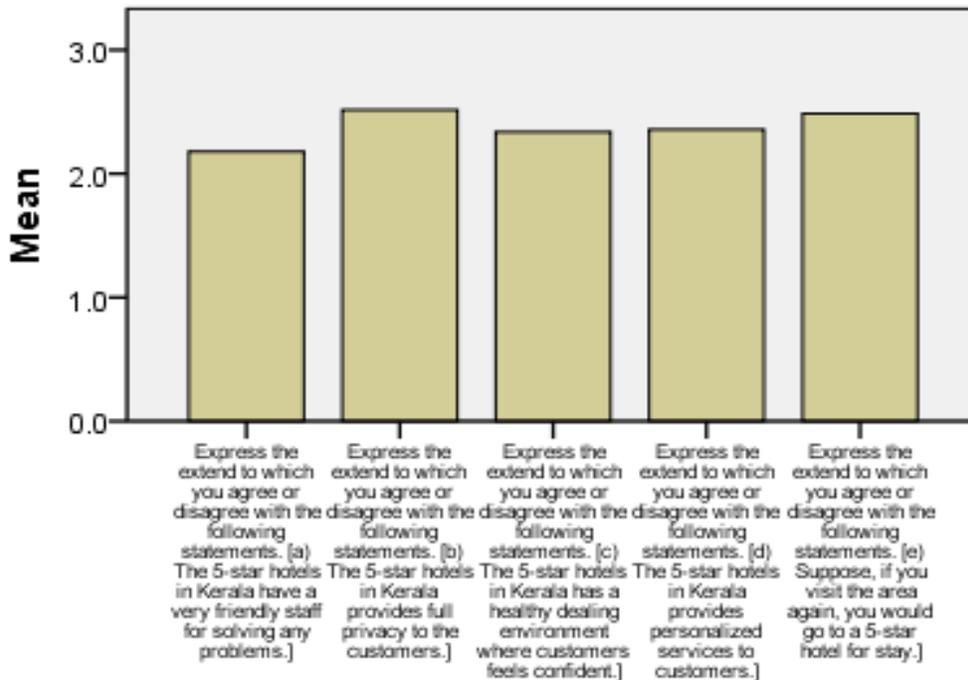
Table 3.3(a) Correlation analysis between CRM and customer Retention with the Service

		The 5-star hotels in Kerala have a very friendly staff for solving any problems.	The 5-star hotels in Kerala provides full privacy to the customers.	The 5-star hotels in Kerala have a healthy dealing environment where customers feel confident.	The 5-star hotels in Kerala provides personalized services to customers	Suppose, if you visit the area again, you would go to a 5-star hotel for stay.
The 5-star hotels in Kerala have a very friendly staff for solving any problems.	Pearson Correlation	1	.580	.686	.615	.549
	Sig (2 tailed)			.000	.000	.000
	N	101	101	101	101	101
The 5-star hotels in Kerala provides full privacy to the customers.	Pearson Correlation	.580	1	.640	.629	.646
	Sig (2 tailed)	.000		.000	.000	.000
	N	101	101	101	101	101
The 5-star hotels in Kerala have a healthy dealing environment where customers feel confident.	Pearson Correlation	.686	.640	1	.541	.621
	Sig (2 tailed)	.000	.000		.000	.000
	N	101	101	101	101	101
The 5-star hotels in Kerala provides personalized	Pearson Correlation	.615	.629	.541	1	.627
	Sig (2 tailed)	.000	.000	.000		.000

services to customers.	N	101	101	101	101	101
Suppose, if you visit the area again, you would go to a 5-star hotel for stay.	Pearson Correlation	.549	.646	.621	.627	1
	Sig (2 tailed)	.000	.000	.000	.000	
	N	101	101	101	101	101

The correlation analysis shows that there is an association between CRM and customer Retention because p value <0.05 (p=0.01). Hence, we have enough evidence to accept the hypothesis, since the correlation is significant at 0.01 level.

Table 3.3(b) Graphical representation of Customer Retention with the service



3.4 DEPENDENCE OF CRM ON CUSTOMER SATISFACION WITH THE SERVICE

In order to be successful in the market, it is not sufficient to attract new customers. Managers must concentrate on retaining existing customers implementing effective policies of Customer Satisfaction. A management approach focused on customer satisfaction can improve customer loyalty, thus increasing the positive image of the hotel. In order to find whether there is a relationship between CRM and Customer satisfaction Correlation analysis is carried out and the graphical representation is also shown. It is shown in table 3.3(a) and 3.3(b). Hence, the following hypothesis is proposed.

H2: There is a positive relationship between Customer Relationship Management and Customer Satisfaction in 5-star hotels.

Table 3.4 (a) Correlation analysis between CRM and Customer Satisfaction with the Service

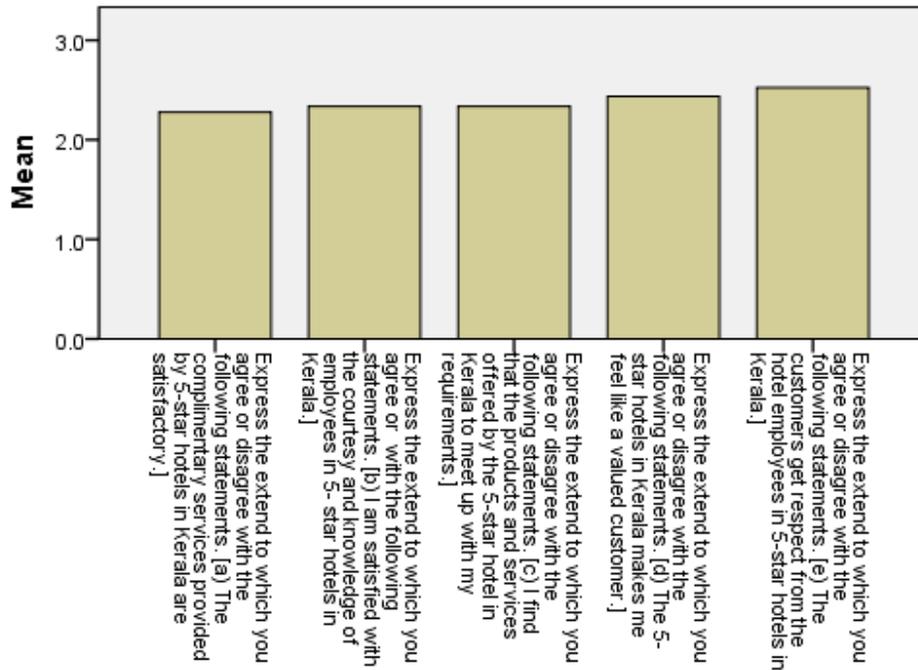
		The complimentary services provided by 5-star hotels in Kerala are satisfactory.	I am satisfied with the courtesy and knowledge of employee in 5-star hotels in Kerala.	I find that the products and services offered by the 5-star hotels in Kerala to meet up with my requirements.	The 5-star hotels in Kerala make me feel like a valued Customer.	The customers get respect from the hotel employee in 5-star hotels in Kerala.
The complimentary services provided by 5-star hotels in Kerala are satisfactory.	Pearson Correlation	1	.610	.676	.606	.616
	Sig (2 tailed)		.000	.000	.000	.000
	N	101	101	101	101	101
I am satisfied with the courtesy and knowledge of employee in 5-star	Pearson Correlation	.610	1	.667	.657	.656
	Sig (2 tailed)	.000		.000	.000	.000
	N	101	101	101	101	101

hotels in Kerala.						
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I find that the products and services offered by the 5-star hotels in Kerala to meet up with my requirements.	Pearson Correlation	.679	.667	1	.657	.653
	Sig (2 tailed)	.000	.000		.000	.000
	N	101	101	101	101	101
The 5-star hotels in Kerala make me feel like a valued Customer.	Pearson Correlation	.606	.757	.657	1	.687
	Sig (2 tailed)	.000	.000	.000		.000
	N	101	101	101	101	101
The customers get respect from the hotel employee in 5-star hotels in Kerala.	Pearson Correlation	.616	.656	.651	.627	1
	Sig (2 tailed)	.000	.000	.000	.000	
	N	101	101	101	101	101

The correlation analysis shows that there is a relationship between CRM and customer Satisfaction because p value <0.05 (p=0.01). Hence, we have enough evidence to accept the hypothesis, since the correlation is significant at 0.01 level.

Table 3.4(b) graphical representation of customer satisfaction with the service.



3.5 DEPENDANCE OF CRM ON CUSTOMER VALUE WITH THE SERVICE

For the customer value is a lived experience and is generally a trade-off between benefits and costs. In the hotel industry value is delivered through a number of vehicles including quality of rooms, atmospherics of the hotel, meals and recreational/sporting facilities. In order to find out whether there is any relationship between CRM and customer value, correlation analysis is carried out. It is shown in table 3.4(a) and the graphical representation in table 3.4(b). Hence, the following hypothesis is proposed.

H3: There is a significant relationship between Customer Relationship Management and Customer Value in 5-star hotels.

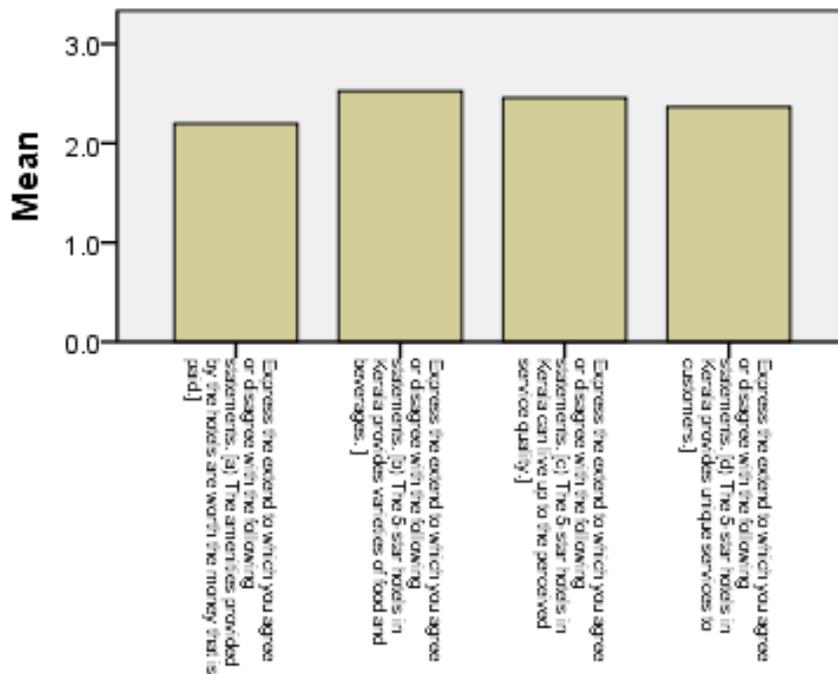
Table 3.5 (a) Correlation analysis between CRM and customer value with the service

		The amenities provided by the hotels are worth the money that is paid.	The 5-star hotels in Kerala provides variety of food and beverages.	The 5-star hotels in Kerala can live up to the perceived service quality.	The 5-star hotels in Kerala provide unique services to customers.
The amenities provided by the hotels are worth the money that is paid.	Pearson Correlation	1	.622	.493	.337
	Sig (2 tailed)		.000	.000	.000
	N	101	101	101	101
The 5-star hotels in Kerala provides variety of food and beverages.	Pearson Correlation	.622	1	.600	.562
	Sig (2 tailed)	.000		.000	.000
	N	101	101	101	101

The 5-star hotels in Kerala can live up to the perceived service quality.	Pearson Correlation	.493	.600	1	.632
	Sig (2 tailed)	.000	.000		.000
	N	101	101	101	101
The 5-star hotels in Kerala provides unique services to customers.	Pearson Correlation	.337	.562	.632	1
	Sig (2 tailed)	.000	.000	.000	
	N	101	101	101	101

The correlation analysis shows that there is an association between CRM and customer Value because p value <0.05 (p=0.01). Hence, we have enough evidence to accept the hypothesis, since the correlation is significant at 0.01 level.

Table 3.5(b) shows graphical representation of Customer value with the service



**CHAPTER 4:
FINDINGS, SUGGESTIONS AND
CONCLUSIONS**

4.1 LIST OF FINDINGS

1. A population of 101 respondents was surveyed which constitutes 57.4% of Female, 37.6% of Male, and 5% prefer not to say. 20.8% people are less than 20 years, 34.7% are between the age group 21- 30 years, 22.8% are between 31-40 years, 8% are between 41-50 years. 42.6% are students who responded, 41.6% are employee/employer, 6.9% are homemaker and 8.9% are retired. The monthly income is less than 50000 for 46.5% of people, 50000-70000 for 25.7% of people, 70000-90000 for 14.9% of people and more than 90000 for 12.9% of people.
2. By doing percentage analysis to find the customer loyalty, we found that 25.7% most likely visit a 5-star hotel, 17.8% chose Likely, 23.8% chose Neutral, 11.9% chose Somewhat likely and 20.8% chose Not likely. 34.7% most likely recommend the hotel of their choice to friends or family, 14.9% Likely, 24.8% Neutral, 22.8% Somewhat likely, and 3.0% chose Not likely. 26.7% most likely switch the hotel their favorite hotel, if a competitor was cheaper, 15.8% Likely, 28.7% Neutral, 15.8% Somewhat likely, and 12.9% chose Not likely.
3. The correlation analysis in table 3.3(a) shows that there is an association between CRM and customer Retention because p value <0.05 ($p=0.01$). Hence, we accepted the hypothesis, since the correlation is significant at 0.01 level. Also, table 3.3(b) shows the customer retention in a graphical representation.
4. We also found the positive relationship between customer satisfaction and CRM, the correlation analysis for the same is shown in table 3.4(a) which shows that p value <0.05 ($p=0.01$). Hence, we have enough evidence to accept the hypothesis, since the correlation is significant at 0.01 level. Also, the graphical representation which shows the relationship of CRM with customer satisfaction is shown in table 3.4(b).
5. We proved that there is a significant relationship between CRM and customer value by doing the correlation analysis in table 3.5(a) which proves that there is an association between CRM and customer Value because p value <0.05 ($p=0.01$). Hence, we have enough evidence to accept the hypothesis, since the correlation is significant at 0.01 level. Also the graphical representation for the same is shown in table 3.5(b).

4.2 Suggestions

- The concept of Customer Relationship Management, the Hotel manager should provide the employees with training and increase their motivation by rewards.
- The Hotel manager should focus on the staff's scientific and practical skills and capabilities.
- The company must continue in management studies in order to identify the consumers' present and future needs and desires to meet their desires and needs as well as they expected.
- To raise their positive psychological level, to live up to the best level of dealing with consumers in line. This will be achieved by qualified and trained staff who can cope up with the development of current and future surroundings to win the consumer's satisfaction.
- The institution should deal consumers trustworthily and credibly through commitment to the delivery dates of orders without bias to gain consumer's trust of the hotel institution.
- The institution must take care of the staff's external appearance in order to win the consumer's satisfaction.

4.3 Conclusion

The term Customer Relationship Management (CRM) describes systems and processes within organization which, with the help of customer data, aim to unify and improve customer service in order to achieve higher levels of customer loyalty. Customer Relationship Management brings together various departments, such as sales and marketing, to ensure a uniform approach which ultimately contributes to increasing the organization's success.

Customer relationship management is a continued process of new value identification and creation with each customer and then sharing the benefits of this value throughout the life-cycle of an organization. Based on this, the study examined Customer relationship management and customer retention of 5-star hotels in Kochi. The research was conducted as a result of discovering the satisfaction rate and retention rates of these industries. The focus of the study was to determine ineffective CRM has an impact on customer loyalty, a long- or short-term financial impact on the organization, whether managing customer relationship effectively builds customer satisfaction in the organization and if the customer value benefits in making another purchase. In the process, relevant theoretical literatures were reviewed and it was discovered that CRM is an enterprise approach to understanding and influencing customer behavior through meaningful communications in order to improve customer satisfaction, customer retention, customer loyalty, and customer value.

BIBLIOGRAPHY

- [https://www.researchgate.net/publication/312507216_Employment_Opportunities_and_Challenges_in_Tourism_and_Hospitality_Sectors](https://www.researchgate.net/publication/312507216)
- <https://www.mordorintelligence.com/industry-reports/hospitality-industry-in-india>
- [https://www.researchgate.net/publication/338584309_A_Study_of_Customer_Satisfaction_and_Customer_Loyalty_in_the_Restaurant_and_Hotel_Industry_of_Pakistan_1](https://www.researchgate.net/publication/338584309)
- [https://www.researchgate.net/publication/285927801_Customer_Retention](https://www.researchgate.net/publication/285927801)
- [https://www.google.com/url?q=https://www.researchgate.net/profile/Chetioui-Youssef/publication/321805952_The_Impact_of_CRM_dimensions_on_Customer_Retention_in_the_Hospitality_Industry_Evidence_from_the_Moroccan_Hotel_sector/links/5a32a97aa6fdcc9b2d755bea/The-Impact-of-CRM-dimensions-on-Customer-Retention-in-the-Hospitality-Industry-Evidence-from-the-Moroccan-Hotel-sector.pdf&usg=AOvVaw1SKxRi_wT8a7QBNamBGhhV](https://www.google.com/url?q=https://www.researchgate.net/profile/Chetioui-Youssef/publication/321805952)
- [https://www.google.com/url?q=https://www.researchgate.net/publication/220542839_Building_Customer_Value_in_the_Hospitality_Industry_Towards_the_Definition_of_a_Customer-Centric_Information_System&usg=AOvVaw3IHf8WUX8YR4XCeAaV7unB](https://www.google.com/url?q=https://www.researchgate.net/publication/220542839)
- [https://www.google.com/url?q=https://www.researchgate.net/publication/330541280_A_STUDY_OF_CUSTOMER_SATISFACTION_TOWARDS_HOTEL_INDUSTRY_IN_KASHMIR_VALLEY&usg=AOvVaw3Vaab447z7e09vMm_E15s3](https://www.google.com/url?q=https://www.researchgate.net/publication/330541280)

REFERENCES

- Ananth M, DeMicco FJ, Moreo PJ, Howey RM (1992). Market-place lodging needs of mature travelers. *Cornell Hotel Restaur. Adm. Q*,33(4): 12–24.
- Atkinson A. (1988). Answering the eternal question: what does the customer want? *Cornell Hotel Restaur. Adm. Q*, 29(2): 12–14.
- Akroush, N.M., Dahiyat, E.S., Gharaibeh, S.H., Abu-Lail, N.B. (2011), Customer relationship management implementation. An investigation of a scale’s generalizability and its relationship with business performance in a developing country context. *International Journal of Commerce and Management*, 21(2), 158-191.
- Almotairi, M. (2009), A Framework for CRM Success. Proceedings of the European and Mediterranean Conference on Information Systems 2009. Izmir, Turkey, 13-14 July.
- Asikhia, O. (2010), Customer Orientation and Firm Performance among Nigerian Small and Medium Scale Businesses. *International Journal of Marketing Studies*, 2(1), 197- 213.
- Azizi, S., Movahed, A.S., Khah, H.M. (2009), Medical Equipment Sector. The Effect of Marketing Strategy and Marketing Capability on Business Performance. Case Study: Iran's Medical Equipment Sector. *Journal of Medical Marketing*, 9(4), 309–321.
- Balaram, A., Adhikari, B. (2010), Managing Customer Relationships in Service Organizations. *Administration and Management Review*, 21(2), 65-78.
- Baran, R. J., Galka, R., Strunk, P. D. (2008), Principles of customer Relationship Management. U.S.A: Thomson.
- Barney, B.J., Delwyn, N. (2007), Resource-Based Theory: Creating and Sustaining Competitive Advantage. Oxford: Oxford University Press.
- Becker, U.J., Greve, G., Albers, S. (2009), The impact of technological and organizational implementation of CRM on customer acquisition, maintenance, and retention. *International Journal of Research in Marketing*, 26(3), 207–215.
- Barsky J, Labagh R, (1992). A strategy for customer satisfaction. *Cornell Hotel Restaur. Adm. Q*, 35(3): 32–40.
- Barsky J, Nash L, (2003). Customer satisfaction: Applying concepts to industry-wide measures. *Cornell Hotel Restaur. Adm. Q*, 44(4): 173-183.
- Barsky J, Nash L, (2006). Companies update loyalty programs, increase effectiveness. *Hotel Motel Manage*, 22(11): 28-29.
- Berkowitz (2006). Customer Relationship Management. 8 Common goals for a CRM Program. What are Key Drivers of Customer Satisfaction? [Online] Available at: <http://onlinesuccesscentre.com>.
- Wu, S., Lu, C. (2012), The relationship between CRM, RM, and business performance: A study of the hotel industry in Taiwan. *International Journal of Hospitality Management* 31, 276–285.

- Lin JSC, Wu CY (2011). The role of expected future use in relationship-based service retention. *Managing Service Quality* 21: 535-551.
- Maxham JG (2000) The service recovery's influence on customers' satisfaction, positive word of mouth and purchase intentions. *Journal of Business Research* 54: 11-24.
- Mguyen, T.U.H., Sherif, J. S., and Newby, M. (2007), Strategies for successful CRM implementation. *Information Management and Computer Security*, 15(2), 102-15.
- Mohammed, A, Rahid, B, & Tahir, (2014), The Mediating Influence of Marketing Capabilities on the Relationship Between Knowledge Management and Organization Performance in Hotel Industry. *Middle- East Journal of Scientific Research* 19 (12): 1679- 1689, 2014.
- Sin, L.Y.M., Tse, A.C.B., Chan, H. (2006), The Effect of Relationship Marketing Orientation on Business Performance in the Hotel Industry. *Journal of Hospitality and Tourism Research*, 30(4), 407-426.
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- Customer Relationship Management And Customer Loyalty In Hospitality Industry In South-East, Nigeria Dr. Michael Okoye-Chine.
- Kuwait Chapter of *Arabian Journal of Business and Management Review* Vol. 4, No.7; March. 2015.

ANNEXURE 1

QUESTIONNAIRE

1)Name

2)Age *

- 20 years
- 21-30 years
- 31-40 years
- 41-50 years

3)Occupation *

- Student
- Employee/Employer
- Homemaker
- Retired

4)Monthly Income *

- Less than 50000
- 50000 - 70000
- 70000 - 90000
- More than 90000

5)Education *

- High school
- Bachelor's Degree
- Master's Degree
- Postgraduate Degree

6) Do you visit a 5-star hotel frequently? *

- Most likely
- Likely
- Neutral
- Not Likely
- Somewhat Likely

7) How likely are you to recommend the Hotel of your choice to your friends or family? *

- Most likely
- Likely
- Neutral
- Somewhat Likely
- Not likely

8) How likely would you switch your favorite hotel, if a competitor was cheaper? *

- Most likely
- Likely
- Neutral
- Somewhat Likely
- Not Likely

10) Express the extent to which you agree or disagree with the following statements.

*

- 1) Strongly Disagree
- 2) Disagree
- 3) Neither Agree nor Disagree
- 4) Agree
- 5) Strongly Agree

a) The complimentary services provided by 5-star hotels in Kerala are satisfactory.						
b) I am satisfied with the courtesy and knowledge of employees in 5- star hotels in Kerala.						
c) I find that the products and services offered by the 5-star hotel in Kerala to meet up with my requirements.						
d) The 5-star hotels in Kerala makes me feel like a valued customer.						
e) The customers get respect from the hotel employees in 5-star hotels in Kerala.						

11) Express the extent to which you agree or disagree with the following statements. *

1. Strongly Disagree
2. Disagree
3. Neither Agree nor Disagree
4. Agree
5. Strongly Agree

a) The amenities provided by the hotels are worth the money that is paid.					
b) The 5-star hotels in Kerala provides varieties of food and beverages.					
c) The 5-star hotels in Kerala can live up to the perceived service quality.					
d) The 5-star hotels in Kerala provides unique services to customers.					

12) Express the extent to which you agree or disagree with the following statements. *

- 1) Strongly Disagree
- 2) Disagree
- 3) Neither Agree nor Disagree
- 4) Agree
- 5) Strongly Agree

a) The 5-star hotels in Kerala have a very friendly staff for solving any problems.					
b) The 5-star hotels in Kerala provides full privacy to the customers.					
c) The 5-star hotels in Kerala have a healthy dealing environment where customers feel confident.					
d) The 5-star hotels in Kerala provides personalized services to customers.					

e) Suppose, if you visit the area again, you would go to a 5-star hotel for stay.					
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ANNEXURE 2

List of 5 Star Hotels in Kochi

(Source: Google)

Crowne
Plaza
Kochi, an
IHG hotel



Kochi
Marriott
Hotel



**Radisson
Blu Kochi**



**Trident,
Cochin**



**Taj
Malabar
Resort &
Spa, Cochin**



**Grand
Hyatt Kochi
Bolgatty**



**Casino
Hotel, CGH
Earth**



**Le
Maritime
Kochi**



PROJECT REPORT
**A STUDY ON THE EFFECT OF PANDEMIC RELATED
PERCEIVED STRESS AND WELL-BEING AMONG YOUNG
ADULTS**

Submitted by:

RIFLI (SB19PSY058)

MALAVIKA MAHESH (SB19PSY055)

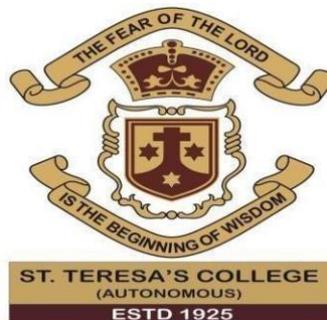
SERENA S PONMANY (SB19PSY034)

Under the guidance of:

MS. ANN JOSEPH

In partial fulfillment of the requirement for award of the degree of

B.Sc. PSYCHOLOGY



ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Nationally Re-accredited at 'A++' level (4th cycle) Affiliated to: Mahatma

Gandhi University

MARCH 2022

CERTIFICATE

This is to certify that the project report entitled, “A STUDY ON THE EFFECT OF PANDEMIC -RELATED PERCEIVED STRESS AND WELL-BEING AMONG YOUNG ADULTS”, is a bonafide record submitted by MS. RIFLI (SB19PSY058), MALAVIKA MAHESH (SB19PSY055), and SERENA S PONMANY (SB19PSY034) in partial fulfillment of the requirements for the award of the Degree of Bachelor of Psychology during the academic year 2019-2022.



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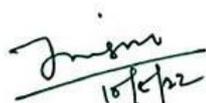


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DECLARATION

I, Malavika Mahesh, hereby declare that the study presented in the dissertation entitled, “Correlation between Pandemic-Related Perceived Stress and Well-being among young adults”, which is submitted to the Department of Psychology, St. Teresa’s College, Ernakulam is a bonafide record of the research work carried out by me, under the supervision and guidance of Ms. Ann Joseph, Assistant Professor, Department of Psychology, St. Teresa’s College, Ernakulam, in partial fulfillment of the requirements for the degree of Bachelor of Science in Psychology and has not previously formed the basis for the award of any degree, diploma, fellowship, title or recognition before.

Place: Ernakulam

Date:

Rifli

Malavika Mahesh

Serena S Ponmany

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Above all, I thank God Almighty for blessing me in all the stages of the project and for helping me complete the project successfully.

Thanking you

Rifli

Malavika Mahesh

Serena S Ponmany

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ABSTRACT

Background: The Corona-virus disease (COVID-19) outbreak spawned by infection of SARS-CoV-2 virus is one of the key happenings of the century. The outbreak that set off from the Chinese City of Wuhan accompanied a situation of socioeconomic decline and mental health crisis worldwide. The psychological welfare of many people were severely affected due to the pandemic and pandemic related concerns. The aim of this study is to examine the association between pandemic-related perceived stress and well-being among the age group of young adults.

Methodology: The study adopted a quantitative approach. The Pandemic-Related Perceived stress scale and the WHO-5 Well-Being Index were the instruments used to measure these variables in the sample. The sample consisted of 250 young adults of age group 18-25 who were assessed using questionnaires distributed through google forms. The sampling method used was convenience sampling

Results: Results of the study revealed that that there is a significant negative relationship between Pandemic related perceived stress and well-being. There is no significant difference between males and females in pandemic- related perceived stress. Results also indicate no significant difference between males and females in well-being.

Conclusion: From the findings of the study, it can be concluded that in the context of COVID-19, in young adults, there is a relationship between the perceived stress related to the events/experiences during pandemic and their well-being, and there are no gender differences in this. This information makes an important revelation considering that young adults were deemed healthy and relatively unaffected during the pandemic.

Keywords: *Pandemic-Related Perceived stress, WHO-5 Well-Being Index, College students, Covid-19 pandemic*

CHAPTER I

INTRODUCTION

Background of the topic

In December 2019, the Corona-virus disease (COVID-19) outbreak first observed in the Chinese city of Wuhan spawned by infection of SARS-CoV-2 virus, began to spread throughout the globe. The outbreak created a situation of socioeconomic decline and mental health crisis worldwide. According to a scientific brief released by the World Health Organization (WHO), in the first year of the COVID-19 pandemic, global prevalence of anxiety and depression increased by a massive 25%. Loneliness, fear of infection, suffering and death for oneself and for loved ones, grief after bereavement and financial worries have also all been cited as stressors leading to anxiety and depression. With the imposing of quarantine, the general population, who were accustomed to readily travel and communicate were forced to current social isolation and restrictions. Such isolation is linked to feelings of frustration and uncertainty. The common reactions to the mass quarantine are generalized fear and pervasive community anxiety which are typically associated with disease outbreaks and increased with the escalation of new cases together with inadequate, anxiety-provoking information which was provided by media. (James et al.)

Background of the study

The degree of psychological impact due to the pandemic is not consistent among the general population. Despite being considered the population that is least vulnerable to direct harms of COVID infection, the government enforced restrictions impacted the lives of young people in an unprecedented manner.

When COVID-19 pandemic dispersed throughout the world, it accompanied many serious changes in young adult life such as lower interactions with friends and peers, challenges of e-learning/ remote learning, and challenges with family due to long time presence at home. For college and school students, concerns about the quality of education, concerns regarding the future of work and education aggravated. In India, around 250 million students were affected due to school closures at the onset of lockdown induced by COVID-19. The pandemic posed several challenges in public and private schools which included an expected rise in dropouts, learning losses, and increase in digital divide. For college students, multiple stressors exist, such as fear and worry about their own health and of their loved ones, difficulty in concentrating, disruptions to sleeping patterns, decreased social interactions due to physical distancing, and increased concerns

on academic performance. For working adults, areas of Job security and employment status, working hours at the workplace and working from home, quality of working life, including national- and workplace-level employment relations, workplace culture, gender-based work practices, reconciliation of work and family faced new challenges. (Voltmer et al., 2021)

Such drastic changes contribute to negative consequences in mental health. Among these consequences is an increase in perceived stress. Perceived stress refers to the feelings or thoughts an individual has about how much stress they are under at a given point in time. Perceived stress reflects the interaction between an individual and their environment which they appraise as threatening or overwhelming their resources in a way which will affect their wellbeing (Lazarus & Folkman, 1984). It is strongly associated with anxiety, and depressive symptoms. If an individual perceives their situation as controllable and positively challenging, he/she would become more confident in his/her ability to meet the challenges of the environment and this would result in better wellbeing. Inability to do so hampers well-being. Well-being is the combination of feeling good and functioning well; the experience of positive emotions such as happiness and contentment as well as the development of one's potential, having some control over one's life, having a sense of purpose, and experiencing positive relationships.

A large body of research evidence suggests that women and men respond differently to stress. Women not only experience more stressful life events, but they also have different coping strategies. It is well established that women engage in rumination more so than men, a finding which partially accounts for the greater incidence of anxiety and depression among women (Butler and Nolen-Hoeksema, 1994). These differences seem to be linked to innate factors like genes present on sex chromosomes and external factors like gender roles and expectancy. Such a vulnerability may set stage for higher pandemic-related perceived stress in women during the COVID-19 pandemic.

Problem statement

The study is performed in the context of COVID-19 pandemic, a period that sees a rise in mental health disorders like stress, anxiety, depression, substance abuse disorders in young adults and major psychosocial impacts. These negative consequences vary according to the individual perception of the severity of problems. The primary aim of this study is to find out the effect of pandemic related perceived stress on psychological well-

being, in the population of young adults. The study also attempts to investigate how (if) this perceived stress is experienced by males and females.

Objectives

The objectives of this study is to determine (1) if there exists a relationship between pandemic-related perceived stress and well-being, (2) if there is a relationship between gender and pandemic-related perceived stress, and (3) if there is a relationship between gender and well-being, in the context of COVID-19.

Scope of the study

This study attempts to examine the extent of perceived stress due to pandemic using a sample of 250 emerging adults between the age of 18-25, in an Indian context. It also assesses gender differences of the psychological impact, to get insight into how males and females experience the psychological impact. This allows to tailor the information given to general population by mental health professionals. The information emanating from this research helps professionals focus on the vulnerable sections of the society. This study contributes to the ongoing and emerging pandemic research, and brings to light more knowledge and clarity in a situation of unprecedented events and ambiguity

Need and Significance of the study

This study has important implications for understanding how different individuals are experiencing the pandemic. It can identify who is most affected, predict which sections are more likely to suffer long term impacts, and help formulate strategies to reduce or counter this negative psychological impact. Because young adults are a relatively healthy and safe sub-population, their needs may not appear to warrant immediate attention. This makes it all the more important to divert attention towards their matters.

Quarantine is often an unpleasant experience. Separation from loved ones, the loss of freedom, uncertainty over disease status, and boredom can, on occasion, create dramatic effects. Quarantine is often the first go to solution of authorities when there is a disease spread. Information on the real impacts of such isolation should be revealed so the govt may regulate the quarantine intervals accordingly.

Importantly, post quarantine behaviors of different personalities may differ. For e.g. the likeliness of following 'SMS' scheme (Soap/ hand-washing, Mask and Social

distancing). may vary according to gender. Through the study we get deeper insights into such assumptions.

The knowledge emerging from this study can be used by psychologists to profile the patient with respect to gender. It can be used to organize webinars and workshops to sensitize people about impacts of pandemic on mental health. (Dagens et al., 2020)

Limitations of the study

This study has certain limitations which need to be considered during interpretation of the findings.

The sample of the study is limited to 250 young adults from Kerala, India. Such a limited sample size affects the generalizability of the findings with respect to Indian setting.

The representativeness of the sample is limited, as the population of age limit of 18-25 may include people with different characteristics; it includes adults belonging to working population, non-working population, school students and college students.

The method used for sampling is convenience sampling. This may lead to over representation or under representation of the population.

The method employed for data collection is online survey method. This may lead to inaccuracy in responses due to factors such as lack of a controlled setting, social desirability bias of participants, time constraints, boredom or fatigue of participants, and inability to give responses that truly reflect their perceptions.

CHAPTER II
REVIEW OF LITERATURE

A study was conducted by Derya Çınar, Nazan Kılıç Akça, and Yaşar Bağ to examine the perceived stress and the factors related to COVID 19 that caused it in a sample of emerging nurses during the first stage of the pandemic. The results found that nearly half of the nurses had developed the perceived stress and their working conditions caused this situation. Another study conducted by Imran Aslan, Dominika Ochnik, and Orhan Çınar explore the perceived stress among students in Turkey during the COVID 19 pandemic and concluded that the perceived stress and mental health of the participants are at high risk (2020). A further study conducted by Julio Torales et al looked into the self-perceived stress during the quarantine of the COVID 19 pandemic in Paraguay concluded that the majority of the participants reported a moderate level of self-perceived stress and worsened symptoms of many pre-existing mental disorders (2020). XiaolinZhao, MengxueLan, HuixiangLi, and JuanYang's research (2021) on perceived stress and sleep quality among the non-diseased general public in China during the 2019 coronavirus disease suggested that both sleep quality and the perceived stress needed attention during the pandemic. Rosario Sinta Gamonal Limcaoco et al (2020), identified that the COVID-19 and related events have raised the perceived stress and anxiety of the general population. In a Gender Perspective Survey of perceived stress by Costa et al (2021) in a Population of Unemployed Subjects of Southern Italy it was found that females experience higher perceived stress. Emotional exhaustion prevails in women, while men tend to feel more depersonalized.

Well-being is the state of being comfortable, healthy, or happy. The well-being of the population was affected by the pandemic in many ways: In a cross-cultural study conducted by Montse C. Ruiz, and et al (2021) about health behaviors and well-being of a sample population in the UK, South Korea, Philippines, Latin America, Spain, North America, and Italy concluded that there are significant differences in the well-being of individuals during the COVID 19 pandemic across cultures. Sarah De Pue et al (2021) who studied the impact of COVID 19 pandemic on well-being and functioning of older adults, proposed that the participants reported a significant activity level, sleep quality, well-being, and cognitive functioning. It was also found that the pandemic had a severe impact on the mental health of older adults. Rachel G. Curtis et al (2021) investigated the changes in diet, activity, and well-being of the parents during COVID 19. There were changes in diet and activity and weight. But no significant change in the psychological well-being and weight. A study on subjective well-being in parents during the COVID 19

pandemic in Australia by Elizabeth M. Westrupp et al (2021) explains that the subjective well-being of parents raising children aged between 0 to 18 seems to be disproportionately impacted by the pandemic and related restrictions in Australia. Giacomo Bono, Kresimir Reil, and Jadwiga Hescoc (2020) explored the relationship between stress and well-being in urban college students in the U.S during the COVID 19 pandemic and can grit and gratitude can help. The results suggested that grit and gratitude can help to protect the well-being and better cope with the adversities of the pandemic. In another study done by Jongsik Yu, Junghyun Park, and Sunghyup Sean Hyun (2021) about the impacts of COVID 19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behavior, and employee-customer identification. The results of this study showed that the attributes of perceived pandemic concerns had a significant effect on work stress and employee well-being. In another conducted by XiChen, YuchunZou, and HaiyanGao(2020) on the role of neighborhood social support in stress coping and psychological well-being during the COVID 19 pandemic, he identified that social support from the neighborhood can reduce psychological distress and buffer the effect of COVID-19-related stressors, But the support from friends/relatives affected stress coping limitedly. Interventions to reduce stressors and promote neighborhood support are important to reduce psychological distress during infectious disease outbreaks or other pandemics. Bohlken J et al (2020) inspected the Stress experiences of Healthcare workers during COVID 19 Pandemic and found that extensive strain was reported due to stressful experiences as well as depression and anxiety symptoms. The severity of mental symptoms was influenced by age, gender, occupation, specialization, type of activities performed, and proximity to COVID-19 patients. As mediator variables selection of personnel, preventive interventions, resilience, and social support were reported.

Most studies spanning from 2020 to 2022 have focused on the effect of pandemic on loneliness, virtual learning, entrapment and substance abuse, sleep disorders etc. during quarantine and not much focus directed on the perceived stresses relating to Covid- 19, i.e., stress relating to the subjective perceptions. This includes belief in one's own coping skills, anticipatory anxiety, optimism, sense of control etc. Aim of our study is to assess such Pandemic related perceived stress about events during pandemic and to know its impact on general mental well-being of the participants. Also, this is one of the very first studies done on pandemic-related perceived stress and well-being in and Indian context

and gender differences in perceived stress have not been analyzed among young adults before in the population. This study investigates on the same. Pandemic related perceived stress is measured using Pandemic-Related Perceived Stress Scale and general well-being is measured using WHO's 5 item Well-being Index. Data collection is done on 250 subjects between the age of 18- 25 using convenience sampling.

CHAPTER III
THEORETICAL FRAMEWORK

Stress

According to the American Psychological Association (APA), stress is the physiological or psychological response to internal or external stressors. Stress involves changes affecting nearly every system of the body, influencing how people feel and behave. Stress can be any type of change that causes physical, emotional, and psychological strain

Types of stress

Distress is the negative form of stress that results from being overwhelmed by demands, losses, or perceived threats. Eustress is positive stress that keeps an individual motivated and willing to do something. Acute Stress is of short duration and is encountered in day-to-day activity. Chronic Stress is the stress that seems ongoing which could lead to either biological or psychological issues.

Theories of Stress**Hans Selye's Theory of General Adaptation Syndrome**

Hans Selye was the first to give a scientific explanation for biological stress. His stress model General Adaptation Syndrome states that an event that threatens an organism's well-being (a stressor) leads to a three-stage bodily response. In the first stage 'Alarm' upon encountering a stressor, body reacts with "fight-or-flight" where sympathetic nervous system is activated. The stress hormones cortisol and adrenalin are released into the bloodstream to mobilize body's resources to meet the danger. In stage 2 Resistance, the parasympathetic nervous system returns many physiological functions to normal levels while body focuses resources against the stressor. In Stage 3 Exhaustion if stressor continues beyond body's capacity, organism exhausts resources and becomes susceptible to disease and death.

Lazarus and Folkman's theory of Psychological Stress

According to Lazarus and Folkman, stress is regarded as a relational concept, i.e., stress is not defined as a specific kind of external stimulation nor a specific pattern of physiological, behavioral, or subjective reactions. Instead, stress is viewed as a relationship ('transaction') between individuals and their environment. 'Psychological stress refers to a relationship with the environment that the person appraises as significant for his or her wellbeing and in which the demands tax or exceed available coping resources' (Lazarus and Folkman 1986)

James Lange theory

The founder of functionalist perspective William James believed that the order of the components of emotion was different. According to this theory, the physiological reaction leads to the labeling of an emotion. According to James and Lange, our body's responses to an emotional event are what make up our emotional experience. E.g.: I am in love because my heart rate increases when I look at her, and my stomach flutters due to the nervousness.

Well-Being

Definitions of well-being vary and many terms are used to determine well-being, such as welfare, individual well-being, subjective well-being, happiness, life satisfaction. Ed Diener, defined well-being as a broad umbrella term that refers to all different forms of evaluating one's life or emotional experience, such as life satisfaction, positive affect, and low negative affect (Diener 1984a; Diener et al. 1999). Well-being refers to a quantitative assessment of an individual's daily living conditions in order to determine whether or not they have the capabilities and opportunities to live a good life in a particular country (Dasgupta 1993; Helliwell et al. 2009; Kahneman 2003; Kahneman & Krueger 2006)

Theories of wellbeing**Subjective Well-being (SWB) theory**

This theory refers to individual's dimensions of satisfaction judgement, pleasant emotion and moods, and lack of unpleasant emotion and mood. Subjective well-being is understood to be the sum of cognitive and emotional evaluations of their lives. The life satisfaction can be considered as a more cognitive component of SWB as it refers to a cognitive judgmental process by which a person assesses her quality of life. Happiness by maximizing positive affect and minimizing negative affect are regarded as an affective component of SWB. Wealthier people tend to have higher SWB on average, and poorer people tend to have lower SWB. In countries with generous health care and healthier environment, have higher subjective well-being

The psychological component of well-being

The theory of the psychological component of well-being is initiated by Ryff, who emphasizes optimal psychological functioning for the development and self-realization of the individual. Ryff claims that happiness is a short-term affective well-being (hedonic approach); in order to achieve sustainable well-being, one needs to shift from satisfaction

with life to a sense of meaning in life, and being true to one's inner self (eudaimonic perspective). She proposes six multiple aspects of psychological functioning, as follows:

Self-acceptance: the knowledge and acceptance of oneself, including awareness on personal limitations.

Positive relations: the depth of the connections with significant others
Personal growth: the continued growth and development as a person
Purpose in life: the pursuit of meaningful goals and a sense of purpose in life
Autonomy: a sense of autonomy in thought and action.
Environmental Mastery: the ability to manage complex environments to suit personal needs and values.

One criticism of Ryff's theory is that it gives too much emphasis on environmental mastery, which refers to the power of human beings to modify and transform the environment, while ignoring the positive functioning, such as purposeful engagement in life, realization of personal talents and enlightened self-knowledge etc.

Self-Determination Theory

Ryan and Deci (2000) developed self-determination theory, which begins with the assumption that individuals possess autonomy, with an innate determination toward psychological growth and development, and strive to be competent in facing ongoing challenges and in integrating their experiences into a coherent sense of self. This natural human tendency requires ongoing support from the social environment toward active engagement and psychological growth. A decade later, Ryan and Deci (2011) further improved their theory, incorporating modern conceptions of happiness, including hedonic and eudaimonic perspectives. They view happiness as a symptom rather than a prerequisite of well-being.

Social Well-being Theory

Keyes (1998) introduced the dimension of social well-being, pointing out that wellbeing is "the appraisal of one's circumstance and functioning in society. Individuals remain embedded in social structures and communities, and face countless social tasks and challenges, including:

1. Social integration: the evaluation of the quality of one's relationship to the society and community.

2. Social acceptance: the construal of society through the character and qualities of the other people as generalized category (trust others, think that others are capable of kindness; a social counterpart to self-acceptance);
3. Social contribution: the evaluation of one's social value (belief that one is a vital member of society with something to give to the world);
4. Social actualization: the evaluation of the potential and the trajectory of society (evolution of society and potential);
5. Social Coherence: the perception of the quality, organization and operation of the social world; includes a concern of knowing about the world.

Social Well-being theory can be applied to study individual's capacity for adaptation and integration into the society, such as the case of migration, refugee or asylum seekers.

CHAPTER IV
RESEARCH METHODOLOGY

Aim:

To examine the association between pandemic related stress and well-being among young adults.

Objective of the study:

1. To study the relationship between pandemic related perceived stress and well-being.
2. To study the difference in pandemic related perceived stress among male and female participants.
3. To study the difference in well-being among male and female participants.

Hypothesis:

1. There exists a negative relationship between pandemic related stress and well-being.
2. There is a significant difference in pandemic related stress among male and female participants.
3. There is a significant difference in well-being among male and female participants.

Research design:

The researcher has adopted a correlational research design which investigates relationship between the variables with the help of statistical analysis.

Sources of data:

Primary source of the data was Questionnaire and Secondary sources were Research articles, Journals, Academic books

Sample size:

The sample size was limited to 250 participants.

Inclusion criteria for the sample are the following:

1. Individuals within the age range of 18 and 25.
2. Individuals who are Indian nationals.
3. Individuals who have knowledge of English.

Exclusion criteria for the sample are the following:

1. Participants who were of non-Indian nationality was excluded from the study.

Sampling method:

Convenience sampling technique was used to recruit participants for the study. It is a type of non-probability sampling where sample is drawn from the part of the population that is close to hand.

Method of data collection:

The data required for the research project is collected using survey method i.e., questionnaires by online distribution of questionnaires through google forms to the available adult population who are interested in participating in the study.

Drafting Questionnaire

The questionnaire consisted of five sections.

- Informed consent form: An informed consent form was given to the participant to ensure participant's autonomy and willingness to participate in the study.
- Sociodemographic sheet: Sociodemographic sheet was prepared by the researcher to collect demographic details like age, gender and place.
- Pandemic-Related Perceived stress scale of COVID-19: The scale is made up of 10 items, each of which offers five response options: never, hardly ever, occasionally, almost always and always. This scale is a version of the Perceived Stress Scale (PSS-10-C) by Sheldon Cohen with wording changed to suit the pandemic.
- The WHO-5 Well-being Index

The WHO-5 Well-being Index is a short questionnaire consisting of 5 items which assesses the subjective well-being of the respondents. The respondents were asked to rate how well each of the 5 statements apply to him or her over the past 2 weeks. Each of the 5 items is scored from 5 (all of the time) to 0 (at no time). The raw score therefore theoretically ranges from 0 (absence of well-being) to 25 (maximal well-being).

Data analysis technique

The data was analyzed using Statistical Package for Social Sciences (SPSS) and Excel. SPSS is a statistical software developed by IBM for data management, analysis and investigation.

The following statistical tools were employed for data analysis:

Descriptive statistics

Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a representation of the entire population or a sample of a population.

Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). Measures of central tendency include the mean, median, and mode, while measures of variability include standard deviation, variance, minimum and maximum variables, kurtosis, and skewness.

The arithmetic mean of a given data is the sum of all observations divided by the number of observations.

Arithmetic mean = $\bar{X} = \frac{\sum X_i}{n}$ where i varies from 1 to n.

Standard deviation is the degree of dispersion or the scatter of the data points relative to its mean, in descriptive statistics. It tells how the values are spread across the data sample and it is the measure of the variation of the data points from the mean. The standard deviation of a sample, statistical population, random variable, data set, or probability distribution is the square root of its variance.

$$\sigma = \sqrt{\frac{\sum (X - \mu)^2}{N}}$$

σ = population standard deviation

\sum = sum of...

X = each value

μ = population mean

N = number of values in the population

$$s = \sqrt{\frac{\sum (X - \bar{x})^2}{n - 1}}$$

s = sample standard deviation

X = each value

\bar{x} = sample mean

n = number of values in the sample

Spearman ranking correlation

Correlation is a bivariate analysis that is used to measure whether and how two variables are associated and related to each other. Spearman ranking correlation is a nonparametric measure of rank correlation. It assesses how well the relationship between two variables can be described using a monotonic function. The Spearman correlation between two variables is equal to the Pearson correlation between the rank values of those two variables; while Pearson's correlation assesses linear relationships, Spearman's

correlation assesses monotonic relationships (whether linear or not). If there are no repeated data values, a perfect Spearman correlation of +1 or -1 occurs when each of the variables is a perfect monotone function of the other. The Spearman ranking correlation is used in the study to know if there is a negative relationship between Pandemic Related Perceived Stress and Psychological well being

Normality test: Kolmogorov-Smirnov (K-S) test

A normality test is used to determine whether sample data has been drawn from a normally distributed population (within some tolerance). A number of statistical tests, such as the Student's t-test and the one-way and two-way ANOVA, require a normally distributed sample population.

Kolmogorov-Smirnov test (K-S test or KS test) is a nonparametric test of the equality of continuous (or discontinuous, see Section 2.2), one-dimensional probability distributions that can be used to compare a sample with a reference probability distribution (one-sample K-S test), or to compare two samples (two-sample K-S test).

Reliability

Reliability analysis allows you to study the properties of measurement scales and the items that compose the scales. The Reliability Analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale. Intraclass correlation coefficients can be used to compute inter-rater reliability estimates.

The following model was used: Cronbach's alpha, α , developed by Lee Cronbach in 1951, measures reliability, or internal consistency. "Reliability" is another name for consistency. Cronbach's alpha tests to see if multiple-question Likert scale surveys are reliable. These questions measure latent variables—hidden or unobservable variables like: a person's conscientiousness, neurosis or openness. These are very difficult to measure in real life. Cronbach's alpha will tell you how closely related a set of test items are as a group.

Mann-Whitney U Test

The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. the Mann-Whitney U test allows you to draw different conclusions about your data depending on the assumptions you make about your data's distribution. The Mann-

Whitney test is an alternative for the independent sample t test when the assumptions required by the latter aren't met by the data.

Regression analysis

Regression analysis is a set of statistical processes for estimating the relationships between a dependent variable (often called the 'outcome variable') and one or more independent variables (often called 'predictors', 'covariates', or 'features'). The most common form of regression analysis is linear regression, in which one finds the line (or a more complex linear combination) that most closely fits the data according to a specific mathematical criterion. Simple linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable, and the other is considered to be a dependent variable.

A linear regression line has an equation of the form $Y = a + bX$, where X is the explanatory variable and Y is the dependent variable. The slope of the line is b, and a is the intercept (the value of y when x = 0). a and b are given by the following formulas:

Where, x and y are two variables on the regression line.

b = Slope of the line.

a = y-intercept of the line.

x = Values of the first data set.

y = Values of the second data set.

Simple linear regression was used in the study to determine if Pandemic related perceived stress had a significant influence on the psychological wellbeing.

CHAPTER V
DATA ANALYSIS

The study was conducted among 250 members of young adult population falling between the ages of 18-25, in Kerala, India. The objectives of the study are to determine

1. if there exists a relationship between pandemic-related perceived stress and well-being,
2. if there is a relationship between gender and pandemic-related perceived stress, and
3. if there is a relationship between gender and well-being, in the context of COVID-19.

To meet the objectives of the study the following hypothesis has been put forward that,

1. there exist a negative relationship between pandemic related-perceived stress and well-being,
2. there is a significant difference in pandemic-related perceived stress among male and female participants, and that
3. there is a significant difference in psychological well-being among male and female participants.

The research design used in this study is correlational research design. The data was analyzed using Spearman's rank Correlation Coefficient Analysis. Regression analysis was used to determine if pandemic related perceived stress predicts wellbeing. Mann-Whitney U test was employed to determine the difference of effect (if any) of pandemic related perceived stress among males and females.

The sociodemographic data of the participants are given below:

Figure 1

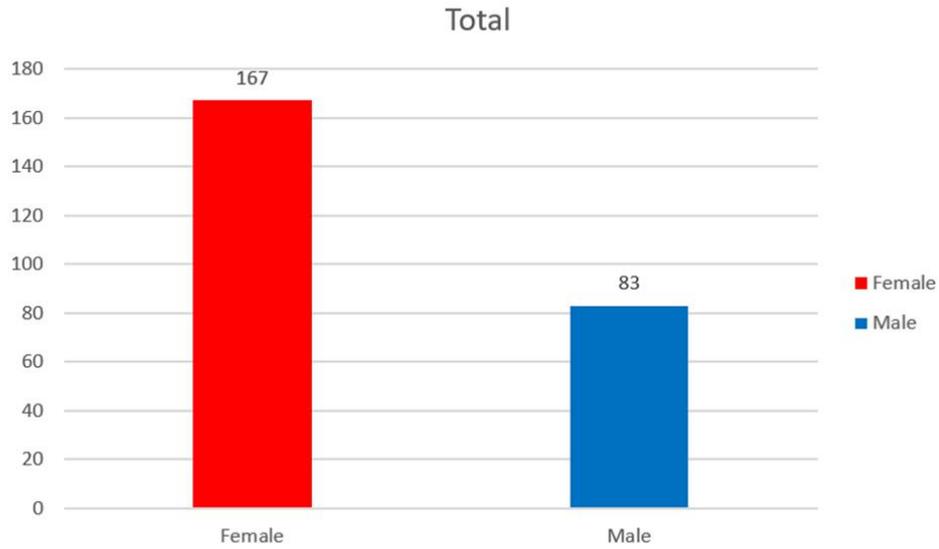


Figure 1 shows the distribution of participants in the study based on gender. There were 83 males and 167 females in the study.

Figure 2

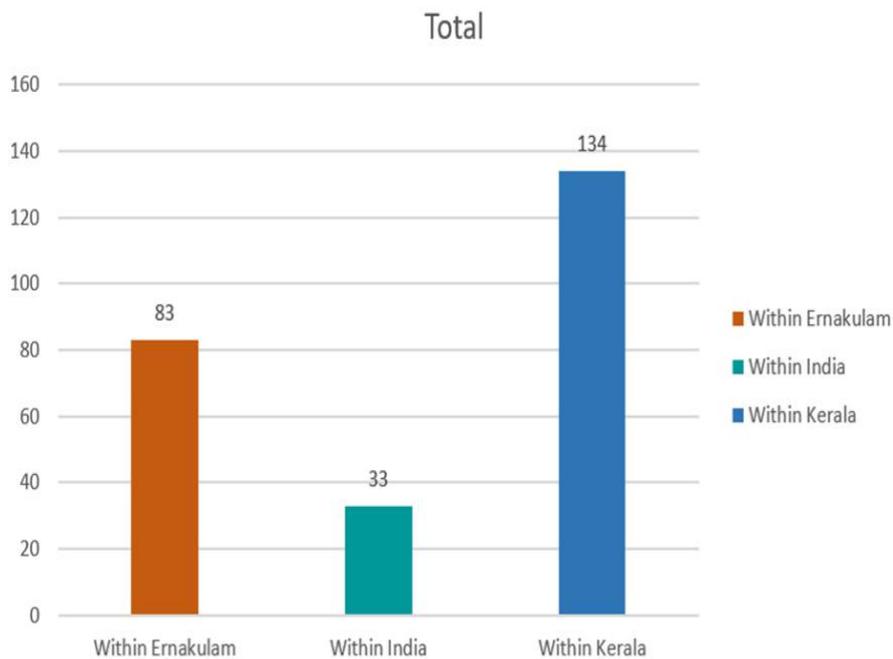


Figure 2 shows the distribution of participants in the study based on place/locality.

Table 1

Reliability of instruments obtained on the sample

Sl. No	Instruments	N	Cronbach's α
1	Pandemic-Related Perceived Stress Scale	250	.746
2	WHO-5 Well-Being Index	250	.839

The table shows the Reliability of the instruments used using Cronbach's α and the number of values in the population (N).

Table 2

Result of Kolmogorov-Smirnova test of normality of Pandemic- Related perceived stress and well-being among young adults

	Statistic	Df	Sig.
Pandemic-Related Perceived Stress	.077	250	.001
Well-Being	.093	250	.001

The Kolmogorov-Smirnova test of normality indicates that the significance level of both Pandemic- Related Perceived Stress and Well-Being are lower than 0.05. Thus, the data received is not normally distributed.

Results of hypothesis testing are given below:

Hypothesis 1: There exists a negative relationship between Pandemic related perceived stress and well-being

Table 3

Summary of Spearman's Rank Correlation between Pandemic related perceived stress and well-being among young adults

Variable	Pandemic-Related Perceived Stress
Well-Being	-.214**

**= p< 0.01

The above table examines the relationship between pandemic related perceived stress and well-being among young adults. With reference to the table, it can be noted that there exists a significant negative correlation between pandemic related perceived stress and well-being. Therefore, the hypothesis that there is a significant correlation between pandemic related perceived stress and well-being is accepted.

This is consistent with the results of recent pandemic research studies that examine effect of perceived stress associated with the events during pandemic on mental health. Perceived stress of the COVID-19 pandemic is positively correlated with adolescents' depression symptoms and character strengths could moderate the relationship between perceived stress of the COVID-19 pandemic and adolescents' depression symptoms. (Liu & Wang, 2021).

A large percentage of the sample of this study includes College students. University students are at risk of psychological distress in the case of traumatic events (Villani et al.,2021). In a study on the impacts of COVID 19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behaviour, and employee-customer identification, it was found that the attributes of perceived pandemic concerns had a significant negative effect on work stress and on employee well-being. (Jongsik Yu, Junghyun Park and Sunghyup Sean Hyun, 2021).

Pandemic related environmental stress has a moderating effect and marginally reduced psychological well-being in college students, while resilience has strong positive effects. (Tan et al., 2021)

Table 4

Regression Analysis predicting wellbeing by Pandemic- Related Perceived stress

Variable	R ²	Adjusted	R ²	Df	F	B	T	Sig.
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Well-Being	.049	.045	1	12.762	-.189	-3.572	.001 ^b
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Table shows the results of a bivariate regression analysis for predicting psychological well-being by Pandemic related perceived stress. The results show that pandemic related perceived stress explains 4.9% variance in wellbeing. ((R²-.049, F-12.762, p<0.05).

Pandemic related perceived stress significantly predicts well-being. (B= -.189, p<0.05)

Hypothesis 2: There is a significant difference in pandemic- related perceived stress among male and female participants

Table 5

Result of Mann Whitney U test showing difference of pandemic- related perceived stress among males and females

Dimensions		N	Mean Rank	U	Z	Sig.
Pandemic- Related Perceived Stress	Males	83	123.80	6789.500	-.262	.793
	Females	167	126.34			

The above table shows the result of Mann Whitney U test showing difference of pandemic related perceived stress among males and females. The significance value of Pandemic- related perceived stress is lower than 0.05. Thus, there is no significant difference in pandemic- related perceived stress among males and females

Hypothesis 3: There is a significant difference in Well-being among male and female participants

Table 6

Result of Mann-Whitney U test showing difference of wellbeing among males and females

Dimensions		N	Mean Rank	U	Z	Sig.
Well-Being	Males	83	129.72	6580	-.652	.514
	Females	167	123.40			

The above table shows the result of Mann Whitney U test showing difference of well-being among males and females. The significance value of well-being is lower than 0.05. Thus, there is no significant difference in well-being among males and females

In recent study done in UK show that girls have been affected more than boys by the COVID-19 pandemic in terms of their mental wellbeing. These gender differences are more pronounced in lower-income families (Mendolia et al., 2022)

In other study no gender differences were detected for satisfaction with life, positive and negative affect, or COVID-19 impact. (Habe et al., 2021)

From the above studies we can conclude that there can be or cannot be significant difference in well-being among males and females, both are possible in an Indian context.

CHAPTER VI
FINDINGS

H0: There exists no significant relationship between pandemic related-perceived stress and well-being

H1: There exists a significant relationship between pandemic related-perceived stress and well-being

Result: Spearman's Correlation between pandemic related-perceived stress and well-being is -0.214 which is significant at 0.01 . It shows that there is a low to moderate negative correlation between Pandemic related perceived stress and Well-Being. Since the p value was less than 0.01 , the null hypothesis was rejected, and the alternate hypothesis was accepted. i.e., there is a significant low-moderate negative correlation between pandemic related-perceived stress and Well-Being.

According to the results it can be noted that there is a weak – moderate relationship between Pandemic related perceived stress and well-being. Pandemic related perceived stress predicts well-being; this was tested using bivariate regression analysis which also proved the same.

H0: There is no significant difference in pandemic-related perceived stress among male and female participants

H1: There is significant difference in pandemic-related perceived stress among male and female participant Level of Significance: 0.05

Mann-Whitney U for pandemic related perceived stress between males and females is 6789.500 which is not significant at 0.05 . It shows there is no significant difference between males and females in pandemic-related perceived stress. Since the p value was more than 0.05 , the alternate hypothesis was rejected and the null hypothesis was accepted, i.e., there is no significant difference in pandemic-related perceived stress among male and female participants

H0: There is no significant difference in psychological well-being among male and female participants

H1: There is significant difference in psychological well-being among male and female participants

Mann-Whitney U for well-being between males and females is 6580.00 which is not significant at 0.05 . It shows there is no significant difference between males and females in well-being. Since the p value was more than 0.05 , the alternate hypothesis was rejected, and the null hypothesis was accepted. i.e., there is no significant difference in well-being stress among male and female participants.

The findings imply that, in the context of COVID-19, there is a relationship between how young adults perceive the events and experiences during pandemic and their well-being. Perceived stress is the feelings or thoughts that an individual has about how much stress they are under at a given point in time or over a given time period. Perceived stress incorporates feelings about the uncontrollability and unpredictability of one's life, how often one has to deal with irritating hassles, how much change is occurring in one's life, and confidence in one's ability to deal with problems or difficulties. It is not measuring the types or frequencies of stressful events which have happened to a person, but rather how an individual feels about the general stressfulness of their life and their ability to handle such stress. More positive perceptions are associated with better coping and mental health. The study also indicates that there are no differences in this perceived stress among males and females.

Low scores on the WHO-5 Well-Being Index indicates poor wellbeing and extremely low scores indicate depressive symptoms. Since a negative correlation indicates the movement of variables in the opposite direction, when pandemic related perceived stress increases, the frequency of poorer well-being increases and as the scores of wellbeing increases the frequency of pandemic related perceived stress decreases.

CHAPTER VII
RECOMMENDATIONS

This study has encountered many limitations that might have had an impact on its ability to solve the problem statement to its full potential. There were limitations due to time constraints which held back the research in terms of quality. It is recommended this topic be more thoroughly researched.

The findings of this study have difficulty being generalized due to the low number of participants in the sample. It is recommended that further study on this topic be conducted with a larger sample size so the views are more universal.

The sampling method of this study was not up to research standards as it was collected using the convenience sampling method, a non-probability sampling method. Using convenience sampling may have contributed to selection bias and influences beyond the control of the researcher, resulting in sampling error. This was due to inaccessibility to resources and connections. Time constraints also limited the search for good quality data.

The method of data collection used for this study was survey method wherein questionnaire was distributed as google forms in the population. The researcher has no good control over the participants in this method. Therefore, the data may have response biases like social desirability bias or extreme responses.

The group of population examined in this study are young adults in the range of 18-25. This group contains wide variety of people including working population, student population, parents, unemployed population, etc and all of them have a wide range of factors that contribute the well-being or perceived stress of the individuals. This may lead to inaccuracies in the study. It is recommended to give more attention to these differences while studying this research.

The study didn't meet 2nd and 3rd hypothesis. This may be due to unique features of the selected population (i.e., the Indian context) or biased sampling methods employed.

It is recommended that further study aims to strengthen this score by superior research control.

CHAPTER VIII

CONCLUSION

The study at hand was primarily conducted to examine the relationship between pandemic related perceived stress and well-being among young adults. The study was conducted among a sample of 250 young adults in Kerala, India. Results revealed that there is a significant relationship between Pandemic related perceived stress and well-being in young adults. There is no significant difference between males and females in pandemic-related perceived stress and well-being. The findings provide evidence on the negative effect of pandemic and related events of quarantine/isolation on the age group of young adults, a sector that was deemed healthy and unaffected. Such information may be important for preparing different mental health services.

- Aslan, I., Ochnik, D., & Çınar, O. (2020). Exploring perceived stress among students in Turkey during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 17(23), 8961. <https://doi.org/10.3390/ijerph17238961>
- Bohlken, J., Schömig, F., Lemke, M. R., Pumberger, M., & Riedel-Heller, S. G. (2020). COVID-19 pandemic: Stress experience of healthcare workers - A short current review: Ein kurzer aktueller Review. *Psychiatrische Praxis*, 47(4), 190–197. <https://doi.org/10.1055/a-1159-5551>
- Bono, G., Reil, K., & Hescox, J. (2020). Stress and wellbeing in urban college students in the U.S. during the COVID-19 pandemic: Can grit and gratitude help? *International Journal of Wellbeing*, 10(3), 39–57. <https://doi.org/10.5502/ijw.v10i3.1331>
- Chen, X., Zou, Y., & Gao, H. (2021). Role of neighborhood social support in stress coping and psychological wellbeing during the COVID-19 pandemic: Evidence from Hubei, China. *Health & Place*, 69(102532), 102532. <https://doi.org/10.1016/j.healthplace.2021.102532>
- Cherry, K. (2020, November 19). How does the james-lange theory account for emotions? Verywell Mind. Retrieved May 1, 2022, from <https://www.verywellmind.com/what-is-the-james-lange-theory-of-emotion-2795305>
- Çınar, D., Kılıç Akça, N., Zorba Bahçeli, P., & Bağ, Y. (2021). Perceived stress and affecting factors related to COVID-19 pandemic of emergency nurses in Turkey. *Journal of Nursing Management*, 29(7), 1916–1923. <https://doi.org/10.1111/jonm.13329>
- Curtis, R. G., Olds, T., Ferguson, T., Frayssé, F., Dumuid, D., Esterman, A., Hendrie, G. A., Brown, W. J., Lagiseti, R., & Maher, C. A. (2021). Changes in diet, activity, weight, and wellbeing of parents during COVID-19 lockdown. *PloS One*, 16(3), e0248008. <https://doi.org/10.1371/journal.pone.0248008>
- Dagens, A., Sigfrid, L., Cai, E., Lipworth, S., Cheng, V., Harris, E., Bannister, P., Rigby, I., & Horby, P. (2020, May 26). Scope, quality, and inclusivity of clinical guidelines produced early in the COVID-19 pandemic: Rapid Review. *The BMJ*. Retrieved May 2, 2022, from <https://www.bmj.com/content/369/bmj.m1936>
- De Pue, S., Gillebert, C., Dierckx, E., Vanderhasselt, M.-A., De Raedt, R., & Van den Bussche, E. (2021). The impact of the COVID-19 pandemic on wellbeing and cognitive functioning of older adults. *Scientific Reports*, 11(1), 4636. <https://doi.org/10.1038/s41598-021-84127-7>

- Gamonal Limcaoco, R. S., Mateos, E. M., Fernández, J. M., & Roncero, C. (2020). Anxiety, worry and perceived stress in the world due to the COVID-19 pandemic, March 2020. Preliminary results. In bioRxiv (p. 2020.04.03.20043992). <https://doi.org/10.1101/2020.04.03.20043992>
- James, M., Jones, H., Baig, A., Marchant, E., Waites, T., Todd, C., Hughes, K., & Brophy, S. (n.d.). Factors influencing wellbeing in young people during COVID-19: A survey with 6291 young people in Wales. PLOS ONE. Retrieved May 2, 2022, from <https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0260640>
- Miller, K. D. (2022, March 23). What are Mental Health Theories? (Incl. List). PositivePsychology.Com. <https://positivepsychology.com/mental-health-theories/>
- Pedrosa, A. L., Bitencourt, L., Fróes, A. C. F., Cazumbá, M. L. B., Campos, R. G. B., de Brito, S. B. C. S., & Simões e Silva, A. C. (1AD, January 1). Emotional, behavioral, and psychological impact of the COVID-19 pandemic. Frontiers. Retrieved May 2, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2020.566212/full>
- Prowse, R., Sherratt, F., Abizaid, A., Gabrys, R. L., Hellems, K. G. C., Patterson, Z. R., & McQuaid, R. J. (1AD, January 1). Coping with the COVID-19 pandemic: Examining gender differences in stress and mental health among university students. Frontiers. Retrieved May 2, 2022, from <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.650759/full>
- Psychological theories of stress. Psychological Theories of Stress - James-Lange, Cannon-Bard. (n.d.). Retrieved May 1, 2022, from <https://explorable.com/psychological-theories-of-stress>
- Ruiz, M. C., Devonport, T. J., Chen-Wilson, C.-H. J., Nicholls, W., Cagas, J. Y., Fernandez-Montalvo, J., Choi, Y., & Robazza, C. (2020). A cross-cultural exploratory study of health behaviors and wellbeing during COVID-19. Frontiers in Psychology, 11, 608216. <https://doi.org/10.3389/fpsyg.2020.608216>
- Torales, J., Ríos-González, C., Barrios, I., O'Higgins, M., González, I., García, O., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). Self-perceived stress during the quarantine of COVID-19 pandemic in Paraguay: An exploratory survey. Frontiers in Psychiatry, 11, 558691. <https://doi.org/10.3389/fpsyg.2020.558691>

- Vandergriendt, C. (2018, September 18). Cannon-Bard Theory of emotion: Definition and examples. Healthline. Retrieved May 1, 2022, from <https://www.healthline.com/health/cannon-bard>
- Voltmer, E., Kösllich-Strumann, S., Walther, A., Kasem, M., Obst, K., & Kötter, T. (2021, July 13). The impact of the COVID-19 pandemic on stress, Mental Health and coping behavior in German university students – a longitudinal study before and after the onset of the pandemic - BMC public health. BioMed Central. Retrieved May 2, 2022, from <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-021-11295>
- Westrupp, E. M., Stokes, M. A., Fuller-Tyszkiewicz, M., Berkowitz, T. S., Capic, T., Khor, S., Greenwood, C. J., Mikocka-Walus, A., Sciberras, E., Youssef, G. J., Olsson, C. A., & Hutchinson, D. (2021). Subjective wellbeing in parents during the COVID-19 pandemic in Australia. *Journal of Psychosomatic Research*, 145(110482), 110482. <https://doi.org/10.1016/j.jpsychores.2021.110482>
- Wikimedia Foundation. (2022, April 15). Psychological stress. Wikipedia. Retrieved May 1, 2022, from https://en.wikipedia.org/wiki/Psychological_stress
- Yan, S., Xu, R., Stratton, T. D., Kavcic, V., Luo, D., Hou, F., Bi, F., Jiao, R., Song, K., & Jiang, Y. (2021, January 7). Sex differences and psychological stress: Responses to the covid-19 pandemic in China - BMC Public Health. BioMed Central. Retrieved May 2, 2022, from <https://bmcpublikealth.biomedcentral.com/articles/10.1186/s12889-020-10085-w>
- Yu, J., Park, J., & Hyun, S. S. (2021). Impacts of the COVID-19 pandemic on employees' work stress, well-being, mental health, organizational citizenship behavior, and employee-customer identification. *Journal of Hospitality Marketing & Management*, 30(5), 529–548. <https://doi.org/10.1080/19368623.2021.1867283>
- Zhao, X., Lan, M., Li, H., & Yang, J. (2021). Perceived stress and sleep quality among the non-diseased general public in China during the 2019 coronavirus disease: a moderated mediation model. *Sleep Medicine*, 77, 339–345. <https://doi.org/10.1016/j.sleep.2020.05.021>

APPENDICES

APPENDIX A

Informed Consent

I'm Malavika Mahesh, undergraduate Psychology student from St. Teresa's College. I'm doing a study on the effect of Pandemic Related Perceived Stress on Well-Being for my final year research project. If you wish to participate, I request you to fill this survey as honestly as possible. All information collected will strictly be kept confidential and only the researcher and the supervisor will have access to it. By clicking "I Agree" below, you are indicating that you have freely consented to participate in this research study. The data obtained would be kept strictly confidential and used solely for research purposes.

o Agree

Sociodemographic sheet

Name:

Age:

Gender:

Place:

APPENDIX B

Pandemic-Related Perceived Stress Scale of Covid-19

	Never	Hardly ever	Occasionally	Almost always	Always
I have felt as if something serious was going to happen unexpectedly with the epidemic	0	1	2	3	4
I have felt that I am unable to control the important things in my life because of the epidemic	0	1	2	3	4
I have felt nervous or stressed about the epidemic	0	1	2	3	4
I have been confident about my ability to handle my personal problems related to the epidemic	4	3	2	1	0
I have felt optimistic that things are going well with the epidemic	4	3	2	1	0
I have felt unable to cope with the things I have to do to monitor for a possible infection	0	1	2	3	4
I have felt that I can control the difficulties that could appear in my life as a result of the infection	4	3	2	1	0
I have felt that I have everything under control in relation to the epidemic	4	3	2	1	0
I have been upset that things related to the epidemic are out of my control	0	1	2	3	4
I have felt that the difficulties are increasing in these days of the epidemic and I feel unable to overcome them	0	1	2	3	4

APPENDIX C

WHO-5 Well-Being Index

Over the last two weeks	All of the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1. I have felt and cheerful in good sprits	5	4	3	2	1	0
2.I have felt calm and relaxed	5	4	3	2	1	0
3.I have felt active and vigurous	5	4	3	2	1	0
4.I woke up feeling fresh and rested	5	4	3	2	1	0
5.My daily life has been filled with things that interest me	5	4	3	2	1	0

PROJECT REPORT

**A STUDY ON THE ROLE OF PERCEIVED MALADAPTIVE
PARENTING SCHEMAS IN PROBLEMATIC INTERNET USE AMONG
ADULTS**

Submitted by:

RITHIKA R. MENON

Register No:

SB19PSY047

Under the guidance of

MS. BINDU JOHN

In partial fulfillment of the requirement for award of the degree of

B.Sc. PSYCHOLOGY



ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Nationally Re-accredited at 'A++' level (4th
cycle) Affiliated to: Mahatma Gandhi University

MARCH 2022

CERTIFICATE

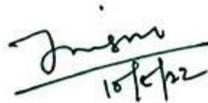
This is to certify that the project report entitled, "THE ROLE OF PERCEIVED MALADAPTIVE PARENTING SCHEMAS IN PROBLEMATIC INTERNET USE AMONG ADULTS", is a bonafide record submitted by MS. RITHIKA R. MENON, Reg.no. SB19PSY047, in partial fulfilment of the requirements for the award of the Degree of Bachelor of Psychology during the academic year 2019-2022.



Ms. Bindu John
Head of the Department
Department of Psychology
St. Teresa's College, Ernakulam



External Examiner:



10/1/22

DECLARATION

I, Rithika R. Menon, hereby declare that the study presented in the dissertation entitled, “The Role of Perceived Maladaptive Parenting Schemas in Problematic Internet Use Among Adults”, which is submitted to the Department of Psychology, St. Teresa’s College, Ernakulam is a bonafide record of the research work carried out by me, under the supervision and guidance of Ms. Bindu John, Assistant Professor, Department of Psychology, St. Teresa’s College, Ernakulam, in partial fulfilment of the requirements for the degree of Bachelor of Science in Psychology and has not previously formed the basis for the award of any degree, diploma, fellowship, title or recognition before.

Place: Ernakulam

Rithika R. Menon

Date: 7.05.2022

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It is not possible to prepare a project report without the assistance and encouragement of other people. This one is certainly no exception. I would like to express my deep heartfelt gratitude to the Department of Psychology, St. Teresa's College, Ernakulam for providing me with the opportunity to undertake the research.

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I extend my sincere thanks to my parents, teachers and my friends who all have supported me throughout the time. I am grateful to each and everyone who has given me guidance, encouragement, suggestions and constructive criticisms which has contributed immensely for this project.

Above all, I thank God Almighty for blessing me in all the stages of the project and for helping me complete the project successfully.

Thanking you,

Rithika R. Menon

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CHAPTER I
INTRODUCTION

INTRODUCTION

BACKGROUND OF THE STUDY

The study aims to explore the role of Perceived Maladaptive Parenting Schemas in the risk of developing Problematic Internet Use (PIU) and its more severe manifestation, internet addiction (IA) among adults. The internet is necessary and beneficial in almost all aspects of life. However, regardless of the many benefits of the internet, research indicates that some individuals overuse the internet and may be at risk of developing internet addiction (Ostovar et al., 2016). Persistent use of the internet may increase the risk of developing addictive online behavior that can negatively impact psychological development, physical health, education, relationships, as well as other behaviors (Cash et al., 2012). It has been understood that all internet addicts are problematic internet users but not all problematic internet users may be internet addicts. According to Young et al. (2003) in the book "Schema Therapy: A Practitioner's Guide, negative parenting styles may interact with a child's temperament in the development of Early Maladaptive Schemas (EMSs), which may in turn increase the risk of developing pathology. EMSs are found to be operating at the deepest level of cognition and affect individuals throughout their lifespan and are dysfunctional to a significant degree. They are dormant until activated by unpleasant and negative situations. In Davis' cognitive-behavioural model of pathological internet use (Davis, 2001), maladaptive cognitions lead an individual to believe that through online existence, they can realize the reinforcement and social contact lacking in their offline lives. This can lead to an increased desire to remain within a virtual social world and spending time on the internet may be an escape from feelings that would otherwise be emotionally painful (Díaz-Aguado et al., 2018). A study by Gupta et al. (2018) states that moderate and high internet use could be employed as a way to cope with or relieve psychological distress symptoms such as depression and anxiety.

PROBLEM STATEMENT

Problematic internet use or excessive use of the internet is often characterised by excessive preoccupations, urges or behaviours regarding computer use and access to the internet that leads to impairment or distress. Internet addiction has been associated with marked functional impairment, including loss of productivity and mental health problems (Fineberg, 2018).

Excessive internet use has been commonly associated with co-morbid mood, anxiety, impulse control and substance use disorders (Shaw & Black., 2008). It has also been suggested that internet addiction can be explained by a need to escape from oneself and that may account for the excessive playing of internet games (Kwon et al., 2009). A study by Dogan et al. (2015) has also revealed that perceived parenting styles may play a predictive role in internet addiction. As excessive internet use is a growing public health concern, the present study attempts to determine whether perceived maladaptive parenting schemas are involved in the excessive internet usage in adults.

NEED AND SIGNIFICANCE

Problematic internet use is a growing social issue because it causes neurological complications, psychological disturbances, and social problems in the individual (Cash et al., 2012). There are several factors that have been found to be predictive of internet addiction including personality traits, parental and familial factors, alcohol use and social anxiety. It has been found that only very little is known about the pathological, physiological and cognitive mechanisms that underlie this condition (Weinstein, 2010). The study intends to find out whether perceived maladaptive parenting schemas may be involved in persistent internet use patterns among a population of adults who use the internet regularly. The findings may be beneficial as they could provide information about the schemas that act as risk factors in developing such addictive behaviors. It could also be useful for practitioners as they could target those specific maladaptive schemas or use schema therapy to help overcome internet addiction.

SCOPE OF THE STUDY

Problematic internet use or internet addiction is an issue of concern in today's world and maladaptive parenting schemas could be an important contributory factor. The original assumptions of the study is primarily based on the Young's Schema Theory (Young et al., 2003) which states that early maladaptive schemas did not evolve from normal cognitive development, but primarily from negative parenting experiences. The present study may offer empirical evidence that there may be some relationship between perceived maladaptive parenting schemas and internet addiction. The scope of the study is limited because the sample consists only of people who are between the ages of 18 and 45 years. A percentage

analysis has shown that there are differences in the internet use patterns among young adults and middle-aged people in the selected population. It has been theorised that internet users may experience multiple layers of reward. The internet may possibly function as a variable ratio reinforcement schedule (Young & Nabuco, 2011). The type of application such as general surfing, chat rooms, pornography, social media, games, texting, etc, supports a kind of unpredictable reward structure. This experience of reward may be intensified when combined with stimulating content such as social media, online games or dating sites. This may also create a sense of belongingness within the individual. (Amichai-Hamburger & Ben-Artzi, 2003). Therefore, it can be assumed that the number of hours spent surfing on the internet doesn't necessarily create addiction but the type of content that the individual consumes leads to addiction. This claim is supported in the present study as it has only focused on the number of hours that the respondents spent using the internet but not the type of content they consume. Hence, there is scope for future research.

OBJECTIVES OF THE STUDY

The objectives of the study are:

1. To find out if there is a significant relationship between each of the perceived maladaptive parenting schemas and problematic internet use among adults.
2. To find out if there is a significant relationship between the number of hours of internet use in a day and the severity of problematic internet use.

LIMITATIONS OF THE STUDY

1. The research is a cross-sectional study so the long-term effects of the association of the two variables cannot be studied.
2. The research had more female respondents and so the sample obtained may not be representative of the whole population.
3. There is more scope for research because the kind of content the respondents consume from the internet has not been explored in the present study.

CHAPTER II
REVIEW OF LITERATURE

The present study aims to investigate the possible role of perceived maladaptive parenting schemas in problematic internet use among adults. Many research studies were examined which have discovered the relationship that maladaptive parenting styles and patterns can have with the development of EMSs, along with the possible associations of such underlying negative cognitions with psychopathology including internet addiction and symptoms of depression. Louis et al (2018) aimed at developing a revised validated version of the Young Parenting Inventory (YPI) known as YPI-R2. The results indicate a significant correlation with the 18 Early Maladaptive Schemas (EMSs) which supported the principle of schema therapy that these are associated with negative parenting patterns.

A study examined the role of early maladaptive schemas in internet addiction among a group of adults using the Internet Addiction Test (IAT) and the Young Schema Questionnaire-Short Form (YSQ-SF). The results indicated a significant association between the disconnection/rejection schema domain and the impaired autonomy/performance schema domain with internet addiction (Ostovar et al., 2021).

Shajari et al. (2016) determined a notable relationship between the 15 dimensions of early maladaptive schemas and the five domains of early maladaptive schemas with internet addiction in a study among undergraduate and postgraduate students. The results also indicated that the domain of other-directedness was associated more with internet addiction compared to the other domains. The results of another study by Arpaci (2019) showed that there was no consequential relationship between early maladaptive schemas and smartphone addiction in average mobile users but there was a positive relationship between the schemas of social isolation/mistrust, approval-seeking, and abandonment with smartphone addiction for intermittent users. The schemas of approval seeking and entitlement/insufficient self-control had a significant relationship with smartphone addiction among addicted users.

On examining the early maladaptive schemas of healthy female students and students addicted to the internet, a study revealed that the early maladaptive schemas of abandonment, instability, emotional deprivation, fault and embarrassment, social isolation, alienation and continence, and insufficient self-discipline may be associated with those students addicted to the internet than those who were not (Beheshtian, 2013).

McNicol & Thorsteinsson (2017) analyzed internet addiction in a large sample from internet forums and found that among adolescents, the factors that contributed to internet addiction were the high use of such discussion forums, high rumination levels, and low levels of self-care. In adults, engagement in online video gaming and sexual activity, low email use, as well as high anxiety and high avoidance coping predicted internet addiction. It became apparent that the relationship between internet addiction and psychological distress was mediated by avoidance coping responses.

The role of early maladaptive schemas with recurrent behavioral addictions in a group of late adolescents and young adults and their self-perceived quality of life (QoL) was investigated by Aloi et al. (2020). The results indicated that food addiction seems to be associated with the schema domains of disconnection and rejection, along with a positive association of internet addiction with almost all the domains, except for impaired autonomy and performance, and gambling addiction with impaired autonomy and performance domain. It was also found that the self-perceived quality of life (QoL) was lower for participants with food addiction and internet addiction but not for those with gambling addiction.

In research among Canadian undergraduate female young adults, data collected using an online questionnaire focused on the perception of their parent's monitoring, communication, and conflict and how these were related to Problematic Internet Use (PIU). The results revealed that those who showed signs of PIU experienced both higher levels of perceived conflict and monitoring with both parents and that they perceived they were monitored more by their mothers than their fathers, regardless of the levels of PIU (Esufali, 2020). In a large sample cross-sectional online survey involving 20,472 participants among the general public in China that took place during the COVID-19 pandemic, it was found that the overall prevalence of Internet addiction was 36.7% among the general population during the pandemic and that of severe internet addiction was 2.8%. Since the time spent on recreational internet use had significantly increased during the pandemic, almost half the participants reported increases in the severity of internet addiction. The risk factors included having fewer social supporters, perceived pressure and impact on mental health status due to COVID-19, and being over-occupied playing video games (Li et al., 2021). In a study among 619 Facebook users with the instruments of the Facebook Intrusion Scale and the 90-item Young Schema Questionnaire (YSQ-S3), a positive relationship between Problematic Facebook Use

(PFU) and EMSs of insufficient self-control/self-discipline and approval seeking were determined. It was also found that PFU was negatively associated with EMSs such as social isolation/alienation and self-sacrifice schemas. EMSs, as well as Facebook, use characteristics, such as the time spent using Facebook per week, using Facebook apps, and the number of friends on Facebook were found to be important contributors (Cudo et al., 2020).

A study examining the longitudinal relationship between internet addiction and depressive symptoms among adolescents revealed a unidirectional predictive effect of depressive symptoms on an internet addiction which was more significant in the male group. It was also found that positive coping strategies had a significant negative predictive effect on the random intercept of internet addiction and depressive symptoms, while negative coping styles had a significant positive effect on the random intercept of internet addiction and depressive symptoms (Yi & Li, 2021). In a research study by Musetti et al. (2020), a community sample of 356 adolescents completed self-report questionnaires assessing internet addiction symptoms, peer- and parent-related loneliness, and detachment from parents. It was found that peer-related loneliness positively predicted Problematic Internet Use (PIU) whereas the detachment from parents fully mediated the association between parent-related loneliness and PIU. Another study conducted among 2016 Chinese college students revealed that maladaptive perfectionism was directly related to students' internet addiction and indirectly predicted students' internet addiction employing the mediator of depression. It was also found that the effect was stronger for males than for females (Yang et al., 2021). Morris (2011) in a study demonstrated that specific types of internet use were associated with cognitive distortion, personality traits, and relationship satisfaction. The number of hours of internet use by type was related to average, the weekly total number of hours of internet use. A difference was also found between users and nonusers of internet pornography. Sharifi (2019) studied the relationship between childhood maltreatment, attachment styles, and maladaptive internet addiction schemas in a sample of 300 students and found that there was a positive relationship between all types of childhood maltreatment and internet addiction disorder. A similar association was also found between all types of childhood maltreatment with attachment styles and with the maladaptive schemas of the students. The instruments used were the Bernstein and Fink's Short-form Childhood Trauma Questionnaire, Hazan and

Shaver's Attachment Styles Questionnaire (1990), Young Maladaptive Schema Questionnaire (2005), and the Young Internet Addiction Questionnaire (1998).

A study conducted among 208 children between ages 8-11 and their 151 parents used the measure of The Parenting Styles (permissive, authoritative, and authoritarian), Dusseldorf Illustrated Schema Questionnaire for Children (DISC), and media usage (TV, internet, and computer games). The results indicated that the relationship between the three parenting styles with the schemas of Subjugation and Emotional Deprivation was significant. An important relationship was also found between the authoritarian parenting style and social isolation schema. The number of hours of TV usage in a day showed such a relationship with schemas of mistrust/abuse; failure; vulnerability to harm or illness and entitlement (Yadegarfarad & Yadegarfarad, 2021). A study by Lo et al. (2020) among 227 fourth and fifth-grade students in Hong Kong showed that worry was related to greater internet addiction among children and the positive association between worry and internet addiction was stronger when the permissive parenting style was higher. The participants completed the questionnaires of the Internet Addiction Test, the Penn State Worry Questionnaire for Children, and the Parental Authority Questionnaire. A cross-sectional study among 2021 secondary students identified that 25.3% of adolescents exhibited IA. It was positively predicted in adolescents from divorced families, low-income families, families in which family conflict existed, and severely dysfunctional families, and was also found that adolescents with restricted internet use were almost 1.9 times more likely to have IA than those who were not restricted (Wu et al., 2016).

A study conducted on a group of 110 Italian high school students between 15 and 18 years of age who completed the measures of Family Assessment Device, Cognitive Appraisal of Risky Events, and Internet Addiction Test found that the perceived behavioral control determines higher risk perceptions, an elevated problem-solving capacity and family communication lead to reduce internet use (Pellerone et al., 2019). In a study conducted on 379 university students, it was found that the permissive and authoritative styles had the least and the authoritarian style has the most effect on problematic internet use. The Problematic Internet Use Questionnaire and the Schaefer Parenting Style were the instruments used. It was also found that the impact of kindness was negative whereas control was neutral. So it could be concluded that people from warm families were unlikely to become addicted to the

internet and kindness may act as a preventive factor for developing PIU (Moazedian et al., 2014).

A study among a group of Italian adults between the ages of 20 and 60 years measured the role of early interpersonal experiences in developing cognitive vulnerability. The Parental Bonding Instrument and the Young Schema Questionnaire-3 were the instruments used and the results indicated that a young adult male with a mother's parenting style characterized by a lower level of nurturance is predictive of the disconnection and rejection domain, whereas a young adult woman, with a higher level of maternal control, is predictive of the impaired limits domain. It has been concluded that because each parent establishes different bonds with their children, the care and control by both parents might impact different domains of development (Pellerone et al., 2017). From all the above literature, it may be concluded that negative parenting schemas and styles may be influential in the development and prevention of problematic internet use and internet addiction. To the best of our knowledge, the relationship between the exact two variables of Perceived Maladaptive Parenting Schemas and Problematic Internet Use among adults has not been examined much. Similarly, such a study may not have been conducted among the adult population from the selected region in the present study.

CHAPTER III
THEORETICAL FRAMEWORK

THE CONCEPT OF SCHEMAS

The word “schema” has had a long history in the early writings of Greek philosophers like Plato and Aristotle. Its meaning translates to “form” or “figure”. In the field of philosophy, the metaphor of a schema as a means of storing information has remained unchanged for centuries. It was the British psychologist Frederic Bartlett (1886-1969) who first introduced the concept of the schema into the world of psychology. It was according to the earlier view by Head and Holmes (1911) that Bartlett’s understanding of schema was based. He implied that schemas should be understood as something that is always active and developing and not as static. His use of the term centered on what and how we remember or on the memory. According to him, a schema evolves with the changing environment. It was in his famous experiment that this idea was supported. The study aimed to examine how a person’s previous knowledge or reconstructions based on their existing schemas affect the memory of a story. A narrative accredited to *The War of Ghosts* was assigned to the participants. They were asked to collect as much detail as possible. The results indicated that the recollections of the participants were distorted in the favour of their cultural biases.

Meanwhile, it was the Swiss clinical psychologist Jean Piaget (1896-1980) who used the concept of schema in his study on the development of reasoning in infants and children. He believed that from infancy onwards, children develop basic schemas. New schemas are formed as new information is learned as the child goes through the different stages of development. These are then added as the building blocks to the previously existing basic schemas. As reported by him, cognitive development was a process that occurred due to both biological/physiological maturation and the interactions with the environment.

The concept of schemas went through a tremendous change with the rise of the field of cognitive psychology. It has played a role in many domains of psychology such as educational psychology, cognitive semantics, psycholinguistics, the scientific study of emotions, and neurobiology, which is the most recent. The word was used in the context of the cognitive ability of a learner to comprehend the reading material in the field of educational psychology. As maintained by this view, a reader may find some information less comprehensible without a suitable schema. People may benefit from activating a schema that will allow them to absorb and retain new material (Anderson et al., 1983). According to

Bloom (1988), when a schema representation was made accessible by reading it from a different perspective, it helped in the memory of a particular story or a text.

The concept of “relational schema” is generally applicable to those structures of cognition that represent constancy in the patterns of interpersonal relatedness. This term has been used in the study of child development to describe how a caregiver guides their evaluation and reaction to a child’s behavior. The idea of schema in the field of cognitive semantics center on the phrase “image schemas”, which is used to describe the different patterns of recurring bodily experiences that emerge from the sensorimotor activities that give structure and organization to our bodily selves. Evidence for such a structure has emerged from the fields of psycholinguistics, cognitive psychology, and developmental psychology, and these are seen as existing beneath our consciousness.

The notion of “emotion schemas” in the scientific study of emotions may be defined as the dynamic interaction of emotion and cognition. Following this view, the present emotional experiences are processed through an internal template which is contained by emotion schemas. For example, they may include the energy levels of the caregivers and their facial muscular patterns observed during emotional interactions. Contrasting to how basic emotions are shaped, emotion schemas are shaped by emotional interactions and experiences that evolve and include the learned convictions that shape the personality. Schemas have also been found to have some characteristics in the field of neurobiology. They are found to be made up of nodes or an associative network structure that comprises basic units which are interconnected. These are also referred to as events or variables. Also, schemas have been viewed to be flexible and continually developing over time as new experiences provide additional information. Thus, the associate template is constantly updated as the schemas store new information. These investigations of schemas have more recently led to an understanding of them also being sensitive to chronological relationships, where these events are embedded into the schema units. Schemas are often seen as being organized into a hierarchy including subschemas. The activation of schemas can take place in the directions of top to bottom or vice versa. They can also overlap and communicate with each other. The functioning of schemas has been connected to the ventromedial prefrontal cortex in the brain and its interactions with the hippocampus.

It has been supported by many investigations and diverse methodologies that schemas do exist. In conclusion, schemas can be defined as a mental structure, frame, or script of an event, situation, object, experience, or emotions made up of an associative network of units used to retrieve previously stored information and interpret a current experience or object as the individual interacts with his/her environment. A schema is chronologically sensitive and operates within a network of other schemas. The prior knowledge or experience distorts the interpretation resulting from the schema. Therefore, schemas can be understood as vital structures in the process of responding adaptively to the rapid and complex flow of information that comes at us in our everyday life.

SCHEMAS IN THERAPY

The concept of schema was introduced in the context of the psychotherapeutic approach developed in the 1970s known as Cognitive Therapy (CT). Aaron Beck (1921-2021) defines schemas as a “structure for screening, coding, and evaluating the stimuli that impinge on the organism” (Beck, 1967). He saw that schemas led to automatic, spontaneous, and seemingly uncontrollable negative thoughts about the self, the world. By equating schemas with core beliefs and understanding them as underlying structures consisting of specific rules that govern information processing and behavior, CT views schemas as evolving and being grouped into categories to help understand and organize the world. CT primarily is involved in modifying these core negative beliefs by helping a person evaluate the rational argument for them in light of more adaptive alternative beliefs.

Jeffrey Young (born 1950), the founder of Schema Therapy, began to integrate constructs from a broad range of other psychotherapy approaches to address the therapeutic stoppage arising with these patients. Thus, ST often overlaps with other models of psychotherapy such as CBT, emotion-focused, attachment, psychodynamic, and experiential techniques drawn from Gestalt Therapy, with a central dimension of ST known as “Limited Parenting” that comes from the idea that maladaptive schemas are caused by the failure of parents and caregivers to meet the core emotional needs. There is a need for more parenting, but since it is with a therapist and not the actual parents, it is “limited”. A maladaptive schema includes cognitive, affective, interpersonal, and motivational processes. They were viewed as fighting to be maintained, and self-perpetuating due to selective attention and distorted processing of

information. The most significant role in this maintenance was viewed as being played by the person's efforts to cope with them. The actions taken to compensate, avoid, or go along with a schema were seen as playing a central role in perpetuating it. He also hypothesized that these maladaptive schemas did not evolve from normal cognitive development but primarily from negative parenting experiences involving, but not limited to severe abuse, neglect, and a lack of healthy limits.

Young put forward his definition of maladaptive schemas that gave importance to the contribution of early childhood experiences from primary caregivers. 18 such maladaptive schemas have been identified to date. According to Young, many people (not all) with such strong schemas are drawn to circumstances that seem familiar to them even though they may not be the healthiest as they come to find comfort in the dysfunction. This is one of the major factors that perpetuate these schemas. Almost all maladaptive schemas are believed to be associated with early parenting experiences, even though they are perpetuated into adulthood. He also postulated that positive or adaptive schemas correspond to every maladaptive schema. An EMS can be defined as 'a broad, pervasive theme or pattern composed of memories, emotions, cognitions, and bodily sensations regarding oneself and one's relationships with others developed during childhood or adolescence elaborated throughout one's lifetime and dysfunctional to a significant degree'.

There are four types of early negative parenting experiences according to Young. The first one is when a child experiences "too little of a good thing" to a toxic frustration of needs such as deprivation of care and love in the early environment, which can most likely lead to Emotional Deprivation or/and Abandonment/Instability schemas. The second type of experience is victimization or traumatization where a child is harmed emotionally or physically. This can lead to the development of the Mistrust/Abuse or Defectiveness/Shame schemas. The third type is when the child experiences "too much of a good thing" which leads to the Insufficient Self-Control/Self-Discipline and/or the Entitlement/Grandiosity schemas. The fourth type is known as selective internalization where the child selectively internalizes the parent's feelings and behaviors. This solely depends on the child's temperament. These childhood experiences often prevent certain needs from being met adequately and lead to the formation and development of maladaptive schemas.

Clinicians in ST often rely on a past parenting inventory developed by Young known as the Young Parenting Inventory (YPI). In the YPI, 17 different parenting constructs that were believed to be related to a specific EMS were measured by the Young Schema Questionnaire 3 Short Form (YSQ-S3). Since Young hypothesized that the environment external to the family was primarily responsible for the development of the EMS of Social Isolation, it was not included. The EMSs were used as a starting point for the development of the parenting constructs.

MEASURES TO EXAMINE SCHEMAS

The Young Parenting Inventory (YPI) measures the perceived parenting experiences of an adult's father and mother separately. The person rates statements about their parents, to which they indicate their responses on a 6-point Likert scale that ranges from a score of 1 (Completely untrue of me) to a score of 6 (Describes me perfectly). The scores for each subscale are provided separately for ratings of fathers and mothers, or those people that the participants considered as having assumed a maternal or a paternal role (grandparent, stepmother or father, or an older sibling). This is because different patterns of correlations may emerge depending on the gender of the parent who is adopting a particular parenting style. This allows for the participants who grew up with only one parent or caregiver to also be included. About four to five items were created for each of the 17 subscales of maladaptive parenting patterns of the YPI. It comprises 72 items in total. A different factor structure emerged from further research, which was shorter and consisted of 37 items and nine subscales.

A study by Louis et al. (2018) aimed at developing a revised validated version of the Young Parenting Inventory (YPI) known as the YPI-R2, which represents the core EMS-related parenting styles. It consists of six subscales and 36 items. The reduced number of items in the YPI-R2, good psychometric validation, and the invariance of the factor structure across Eastern and Western samples indicated significant improvements from the original YPI. The YPI-R2 with six subscales would be able to provide more insight into the nature of negative parenting and can be used hand in hand with the YSQ-S3 in ST practice and research.

PROBLEMATIC INTERNET USE

The problematic use of the internet includes the phenomenon of internet addiction. Internet addiction has been a focus of researchers and experts over the last two decades. Dr. Kimberly Young is the author of the Internet Addiction Test tool that has been widely used for research and selection purposes of addictive symptoms in individuals. She carried out the first empirical study on internet addiction in 1996 and has been systematically investigating the field since then. It is possible to find different terminology for the same phenomenon such as “compulsive internet use”, “excessive use of the internet”, “problematic use of the internet”, “pathological internet usage”, “internet addiction”, “computer dependence” and “net addiction”. Young describes internet addiction as an impulse control disorder that does not include narcotics, while the extended definition of the same author states that this is a condition in which an individual loses control over the use of the internet and continues to use it excessively to the point of experiencing problematic outcomes with negative influences. The difficulties encountered by people who use the internet excessively are categorized into five areas: academic, interpersonal relationships, financial, professional, and physical. Intense debate exists about whether Internet addiction should even be considered a disorder. It is not surprising that no single cause has been identified, apart from the contributing factor of access to the internet.

PSYCHOLOGICAL THEORIES

- **Cognitive-Behavioural Theory**

It has been suggested by several investigators that the compulsive use of the internet ultimately provides ineffective and dysfunctional methods for regulating negative emotions related to cognitions associated with low self-esteem and self-critical thoughts. The long-term consequences, despite the short-term emotional alleviation and distraction, include worsening of relationships, and poor school or work performance. This pattern then fuels a vicious cycle that leads to further maladaptive use of the internet.

- **Social Skills Deficit Theory**

According to this theory, individuals with poor social competence who also may be anxious about social interactions are drawn to the anonymity of the internet and the opportunities it affords for developing relationships in less threatening circumstances than those occurring face-to-face. Also, individuals have greater control regarding their self-presentations and their ability to construct more favorable images for those they may be trying to impress. Even though this nature of internet-mediated communication may help depressed or socially anxious individuals overcome social inhibitions, it may also potentially contribute to avoidance of true intimacy.

Family History

In this area, only a little research exists. In one study, all but one of 20 individuals with problematic internet use had a positive family psychiatric history. In this sample, depression was present in at least 65% of the first- or second-degree relatives, 50% of relatives had bipolar disorder, and 60% had substance dependence. Unfortunately, no inquiry was made as to whether any relatives suffered from problematic internet use.

INTERNET ADDICTION TEST

The most commonly used measurement of internet addiction called the Internet Addiction Test (IAT) is a 20-item scale that measures the presence and severity of internet addiction. This test was designed as a research and diagnostic tool, based on the DSM-IV criterion for pathological gambling diagnosis. The IAT is a symptom-measuring tool and internet addiction here is defined as online compulsive behavior that causes hindering normal social interactions, and also increases daily stress and feelings of solitude, anxiety, and depression. The test measures the degree of involvement in online activities using responses on the 5-degree Likert type scale and categorizes the addictive behavior into four categories: lack of addiction, mild signs of addiction, moderate signs of addiction, and severe addictive behavior. Many studies have confirmed that IAT is a reliable measure covering the key characteristics of pathological internet use. The questionnaire showed good reliability in different countries and with different populations. The test measures the level of internet addiction with 20 items and a range of 0 to 5 (0=Never, 1=Seldom, 2= Occasionally, 3=Frequently, 4=Very often,

5=Always). The total range of the questionnaire is from 0 to 100. The participants can be classified into several categories and the score between 0 to 19 indicates the absence of addiction, 20 to 39 indicates a low level of addiction and an average online user, from 40 to 69 represents a moderate level of addiction, while the result of 70 to 100 assumes a severe level of internet addiction.

CHAPTER IV
RESEARCH METHODOLOGY

OBJECTIVES

1. To find out if there is a significant relationship between each of the perceived maladaptive parenting schemas and problematic internet use among adults.
2. To find out if there is a significant relationship between the number of hours of internet use in a day and the severity of problematic internet use.

HYPOTHESES

1. Ho: There is no significant relationship between each of the Perceived Maladaptive Parenting Schemas and Problematic Internet Use among adults

H1: There is a significant relationship between each of the Perceived Maladaptive Parenting Schemas and Problematic Internet Use among adults.
2. Ho: There is no significant relationship between the number of hours of internet use in a day and the severity of Problematic Internet Use

H1: There is a significant relationship between the number of hours of internet use in a day and the severity of problematic internet use.

RESEARCH DESIGN

The research design of this study is cross-sectional as it takes place at a single point in time. The participants are selected based on particular variables of interest. It considers numerous characteristics at once and can provide information about the current population.

SOURCE OF DATA

The data was collected from a population of adults aged between 18 to 45 years. The respondents were required to fill out an online questionnaire. Participation in the study was completely voluntary. The respondents consented to participation by filling out a consent statement at the start of the questionnaire.

SAMPLE DESIGN

The population involves the desired sample size of 305 adults aged between 18 and 45 years. The method of selecting the sample was done by purposive sampling. The respondents were required to be regular internet users.

Inclusion criteria

- Participants within the age group of 18-45 years.
- Participants who use the internet regularly.

Exclusion criteria

- Participants who are below 18 years and above 45 years of age.
- Participants who do not use the internet regularly.
- Participants who are illiterate or are unable to read or write.

SAMPLE SIZE

The sample size is 305 respondents from the adult population aged between 18 to 45 years, consisting of 196 females, 108 males and 1 respondent who prefers not to say their gender.

SAMPLING METHOD

The sampling method of purposive sampling has been used in the study. It is a form of non-probability sampling. The participants selected were within the age group of 18-45. In the present study, the judgement of the researcher was primarily considered when choosing the members of the population as participants. It focused on specific characteristics of the individuals chosen.

METHOD OF DATA COLLECTION

The data in the present study has been collected from the population by giving out an online questionnaire through Google Forms. An informed consent form was provided at the beginning of the questionnaire to make sure that the confidentiality of the participant's data will be maintained. This was followed by a few questions that collected the demographic

details of the participants. The Young Parenting Inventory-Revised (YPI-R2) was presented, followed by the Internet Addiction Test (IAT). The participants took about 15 to 20 minutes to complete the questionnaire and it was ensured that they filled every item of the questionnaire. The questionnaires are to be scored according to the scoring guidelines given in them and the final results are to be obtained using the SPSS software version 28.0.

TOOLS

The scales that have been used in the study are the Young Parenting Inventory-Revised (YPI-R2) and the Internet Addiction Test (IAT).

- **THE YOUNG PARENTING INVENTORY-REVISED (YPI-R2)**

The Young Parenting Inventory-Revised (YPI-R2) is a self-report measure with 36 items. It measures the participant's perceived maladaptive parenting schemas. The scale consists of statements that the respondents may use to describe their parents and how they treated the respondents. Each statement was rated on a 6-point Likert scale ranging from "Completely Untrue" to "Describes him/her perfectly". The scale consists of the six dimensions of Competitiveness & Status Seeking, Degradation & Rejection, Emotional Inhibition & Deprivation, Overprotection & Overindulgence, Punitiveness, and Controlling.

The YPI-R2 has shown significant correlations with the 18 EMSs, supporting the core view of schema theory that early negative parenting patterns are associated with the development of EMSs. The scale has consistently shown good psychometric properties. It had shown high internal consistency of 0.70–0.92

- **THE INTERNET ADDICTION TEST (IAT)**

The Internet Addiction Test (IAT) comprises 20 items that evaluate attributes related to the obsessive use of the internet. Each statement is scored on a Likert scale with values ranging from 0 to 5. The primary examination of the validity of the test has shown strong internal consistency ($\alpha = 0.90\text{--}0.93$) and good test-retest reliability ($r = 0.85$).

DATA ANALYSIS TECHNIQUES

● CORRELATION

The data analysis technique of correlation is to be used in the present study. A correlation is a statistical measurement of the relationship between two variables. Possible correlations range from +1 to -1. A zero correlation indicates that there is no relationship between the variables. The Spearman's correlation is a non-parametric measure of the strength and direction of association that exists between two variables measured on an ordinal scale. It is denoted by r_s (or the Greek letter ρ , pronounced rho). It is constrained as follows:

$$-1 \leq r_s \leq 1$$

The closer the r_s is to ± 1 , the stronger the relationship. The following guide can be used to describe the strength of the correlation for the absolute value of r_s :

- 0.00 to 0.19- very weak
- 0.20 to 0.39- weak
- 0.40 to 0.59- moderate
- 0.60 to 0.79- strong
- 0.80 to 1.0- very strong

● REGRESSION

Regression is a statistical technique that is used to predict and describe the strength and shape of the relationship between two or more variables. The variable that is to be predicted is known as the dependent variable and the variable that is used to predict is known as the independent variable. In linear regression, one finds the line (or a more complex linear combination) that most closely fits the data according to a specific mathematical criterion.

CHAPTER V
DATA ANALYSIS

The present study aims to investigate the relationship between Perceived Maladaptive Parenting Schemas and Problematic Internet Use among adults. Spearman's correlation and regression were used to find the degree of relation and the prediction level. Normality test was conducted first which indicated that the data has not been sampled from a normal distribution. This led to the use of a non-parametric test.

I. To find out the relationship between the specific perceived maladaptive parenting schemas and problematic internet use

Table 1.1

Correlation Coefficient Between Perceived Maladaptive Parenting Schemas and Problematic Internet Use

Variable	1	2
1. Perceived Maladaptive Parenting Schemas		.404**
2. Problematic Internet Use	.404**	

**p < 0.01 (2-tailed). *p < 0.05; N=305

Here, the independent variable is the Perceived Maladaptive Parenting Schemas and the dependent variable is the Problematic internet use. Spearman's correlation was computed to assess the relationship between the two variables. There is a moderate, positive correlation between perceived maladaptive parenting schemas and problematic internet use. The primary objective of the study is thus confirmed.

$$r_{s(303)} = 0.404, p < 0.001$$

The significance level is $\alpha=0.01$. The p value for the perceived maladaptive parenting schemas is less than 0.05. The null hypothesis of "Ho: there is no significant relationship between each of the perceived maladaptive parenting schemas and problematic internet use among adults" is rejected and the alternate hypothesis of "H1: there is a significant relationship between the perceived maladaptive parenting schemas and problematic internet

use among adults” is accepted. Hence, there is a significant relationship between the perceived maladaptive parenting schemas and problematic internet use among adults.

Table 1.2

Correlation Coefficient Between Each of the Perceived Maladaptive Parenting Schemas and Problematic Internet Use

Variable	1	2	3	4	5	6	7
Competitiveness & Status Seeking							.254
Degradation & Rejection							.436
Emotional Inhibition & Deprivation							.387
Overprotection & Overindulgence							.317
Punitiveness							.350
Controlling							.381
Problematic Internet Use	.254	.436	.387	.317	.350	.381	

**p < 0.01 (2 tailed); *p < 0.05; N= 305

Spearman’s correlation was computed to assess the relationship between each of the perceived maladaptive parenting schemas and problematic internet use among adults. There is a significant correlation between each of the perceived maladaptive parenting schemas and problematic internet use. The results indicate that the parenting schema of Degradation & Rejection shows the most correlation with Problematic Internet Use compared to the other schema domains. This is followed by the parenting schemas of Emotional Inhibition & Deprivation and Controlling. The schema domains of Competitiveness & Status Seeking, Punitiveness, and Overprotection & Overindulgence have comparatively weaker but positive correlation with Problematic Internet Use.

Regression analysis was conducted to test whether Perceived Maladaptive Parenting Schemas significantly predict Problematic Internet Use.

Table 2.1

Regression Analysis Model Summary of Perceived Maladaptive Parenting Schemas and Problematic Internet Use

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.451	.203	.201	14.569

In Table 2.1, R value of .451 represents the simple correlation and indicates a low degree of correlation. The R² value shows how much of the total variance in problematic internet use can be predicted by perceived maladaptive parenting schemas. Here, 20.3% of the variance is accounted for by perceived maladaptive parenting schemas.

Table 2.2

Regression Analysis ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16420.47	1	16420.47	77.357	< 0.001
	Residual	64317.019	303	212.267		
	Total	80737.489	304			

In the above table, $p < 0.001$ which is less than 0.05 which indicates that the regression model significantly predicts the outcome variable.

Table 2.3

Regression Analysis Coefficient Table

Model	Unstandardized Coefficients B	Standardised Coefficients Beta	t	Sig.
1 (Constant)	11.36	2.584	4.397	<.001
Perceived Maladaptive Parenting Schemas	.122	.014	.451	8.75 < .001

Regression equation: $y=ax+b$

$$\text{Problematic internet use} = 11.36 + 0.122$$

Here, b is the slope of the line and $a= Y$ is the intercept of the line.

The ANOVA table shows that the regression is significant where $F = 77.357$, $p = .001$. The model summary table shows that 20.3% of the variance in problematic internet use can be explained by perceived maladaptive parenting schemas.

Table 3.1

Correlation Between Number of Hours of Internet Used in a Day and Problematic Internet Use

Variable	1	2
1.Number of hours of internet used in a day		.304**
2.Problematic internet use	.304**	

** $p < 0.01$ (2 tailed); $p < 0.05$; $N = 305$

Spearman's correlation was computed to assess the relationship between the number of hours of internet used in a day and problematic internet use among adults. There is a positive correlation between the number of hours of internet use in a day and problematic internet use.

$$r_{s(303)} = 0.304, p < 0.001$$

The significance level is $\alpha=0.01$. The p value for the number of hours of internet used in a day is less than 0.05. The null hypothesis of "H₀: there is no significant relationship between the number of hours of internet used in a day and problematic internet use among adults" is rejected and the alternate hypothesis of "H₁: there is a significant relationship between the number of hours of internet used in a day and problematic internet use among adults" is accepted. Hence, there is a significant relationship between the number of hours of internet used in a day and problematic internet use among adults.

Regression analysis was conducted to test whether the number of hours of internet used in a day predicts Problematic Internet Use.

Table 4.1

Regression Analysis of Number of Hours of Internet use in a Day and Problematic Internet Use among adults.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.316	0.1	0.097	15.485

The R value of 0.316 represents the simple correlation and indicates a low degree of correlation. The R² value shows how much of the total variance in the problematic internet can be predicted by the number of hours of internet use. Here, 10% of the variance in problematic internet use can be explained by the number of hours of internet use.

Table 4.2

Regression Analysis ANOVA table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8085.395	1			
	Residual	72652.093	303	8085.395	33.721	< 0.001
	Total	80737.489	304	239.776		

In the table, $p < 0.001$ which is less than 0.05 which indicates that the regression model significantly predicts the outcome variable.

Table 4.3

Regression Analysis Coefficient Table

Model		Unstandardized Coefficients B		Standardized Coefficients Beta	t	Sig.
1	(Constant)	20.901	2.243		9.318	< .001
	Number of hours of internet use in a day	5.39	0.928	0.316	5.807	< .001

Regression equation: $y=ax+b$

$$\text{Problematic internet use} = 20.901 + 5.39$$

Here, b is the slope of the line and $a = Y$ is the intercept of the line.

The ANOVA table shows that the regression is significant where $F = 33.721$, $p = .001$. The model summary table shows that 10% of the variance in problematic internet use can be explained by the number of hours of internet use.

CHAPTER VI

FINDINGS

The study aimed to investigate the relationship between Perceived Maladaptive Parenting Schemas and Problematic Internet Use among adults. The results of Spearman's correlation analysis indicate there is a significant relationship between the perceived maladaptive parenting schemas and problematic internet use among adults. The results indicate that the parenting schema of Degradation & Rejection shows the highest correlation with Problematic Internet Use compared to the other schema domains, followed by Emotional Inhibition & Deprivation and Controlling. The schema domains of Competitiveness & Status Seeking, Punitiveness, and Overprotection & Overindulgence have a comparatively weaker but significant correlation with Problematic Internet Use. Regression analysis shows that 20.3% of the variance in problematic internet use is accounted for by perceived maladaptive parenting schemas. The regression is significant where $F = 77.357$, $p = .001$.

The results from the Spearman's correlation also indicate that there is a significant relationship between the number of hours of internet used in a day and problematic internet use among adults. Regression analysis was conducted to test whether the number of hours of internet used in a day and Problematic Internet Use. This indicates a significant influence on the number of hours of internet use in a day on problematic internet use ($F=33.721$, $p<0.001$, $R^2= 0.1$). The value of R^2 indicates that 10% of all of the variance in problematic internet use can be explained by the number of hours of internet use in a day.

CHAPTER VII
RECOMMENDATIONS

The results of the study imply that there is a moderate significant relationship between the perceived maladaptive parenting schema of Degradation & Rejection and Problematic Internet Use among adults. There is a weak but positive relationship between the other schemas with Problematic Internet Use. The study was conducted over a very short period of time on participants of a selected age group (18 - 45 years). Studies to be conducted in this area can focus on participants who are below 18 and above 45 years of age. Using online questionnaires may be an important limitation which can be overcome by collecting the data in real-time. A lot of factors can play a role in this limitation. They may include the impatience of the respondent, which might make them unable to provide accurate answers to how they feel. The measures used in the study could be combined with other related measures to obtain more nuanced results. In the present study, most of the participants were average internet users and only a few exhibited problematic internet use patterns. The same study on a sample of people who have internet addiction or other disorders could provide many different and significant results. Therefore conducting the study in a much more diverse sample is recommended.

The present study, along with the additional information about the association of other kinds of schemas with internet addiction could be beneficial in a lot of ways. Clinicians who wish to practice Schema Therapy for internet addiction could target those particular schemas that play the most role in it during treatment. With more insight into the nature of these schemas and of the role they may play in developing or perpetuating internet addiction, experts can identify them or prevent unhealthy, addictive internet use in individuals who are at risk for developing internet addiction.

Another such limitation about the study could be that not many researches have been conducted using the same exact variables used in the present study. Comparison of data and derived results would be much more conclusive if there were more studies with the same variables. The study was conducted for a brief period of time and hence the information about the long-term effects of such variables remains unknown. Perhaps, a longitudinal study on these variables could provide more significant results. The respondents were mostly female. Thus a study that considers all genders equally in determining a relationship between variables could provide information about the gender differences. Finally, the present study has only focused on the number of hours that the respondents spent using the internet. The

type of content that the respondents consume or engage in has not been explored. Hence, there is scope for further research.

CHAPTER VIII

CONCLUSION

The aim of the study was to examine the relationship between Perceived Maladaptive Parenting Schemas and Problematic Internet Use among a group of adults. The study also investigated the effect of the number of hours that participants use the internet in a day on Problematic Internet Use (PIU) or internet addiction behaviors. The findings indicate that there is a significant relationship between the perceived maladaptive parenting schemas and problematic internet use among adults with moderate significant correlation between the schema domain of Degradation & Rejection and Problematic Internet Use. There is a weak but significant correlation between all the other schema domains and PIU. Regression analysis shows that 20.3% of the variance in problematic internet use is accounted for by perceived maladaptive parenting schemas. It can also be concluded from the results that there is a significant effect of the number of hours of internet used by the participants in a day and their problematic internet use. In fact, 10% of all of the variance in problematic internet use can be explained by the number of hours of internet use in a day.

REFERENCES

- Černja, I., Vejmelka, L., & Rajter, M. (2019, December 5). *Internet addiction test: Croatian preliminary study - BMC psychiatry*. BioMed Central. Retrieved May 6, 2022, from <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/s12888-019-2366-2>
- Çalışkan, B. (2017). *The Relationship Between Early Maladaptive Schemas, Perceived Maternal Parenting Style, Emotion Regulation Difficulties and Psychological Well-Being*. T.C. Dogus University. Retrieved May 6, 2022, <https://openaccess.dogus.edu.tr/xmlui/bitstream/handle/11376/2975/10134931.pdf?sequence=1&isAllowed=y>
- Aloi, M., Verrastro, V., Rania, M., Sacco, R., Fernández-Aranda, F., Jiménez-Murcia, S., De Fazio, P., & Segura-Garcia, C. (2020). The potential role of the early maladaptive schema in behavioral addictions among late adolescents and young adults. *Frontiers in Psychology, 10*. <https://doi.org/10.3389/fpsyg.2019.03022>
- Amichai-Hamburger, Y., & Ben-Artzi, E. (1970, January 1). *[PDF] loneliness and internet use: Semantic scholar*. undefined. Retrieved May 6, 2022, from <https://www.semanticscholar.org/paper/Loneliness-and-Internet-use-Amichai-Hamburger-Ben-Artzi/bed763241f0809fa25a0280ca49993497df3bd73>
- Arpaci, I. (2019). Relationships between early maladaptive schemas and smartphone addiction: The moderating role of mindfulness. *International Journal of Mental Health and Addiction, 19*(3), 778–792. <https://doi.org/10.1007/s11469-019-00186-y>
- Beheshtian, M. (2013, September 23). *Comparing early maladaptive schemas of healthy female students and those addicted to the internet*. Women Studies. Retrieved May 6, 2022, from https://womenstudy.ihcs.ac.ir/article_1072.html?lang=en
- Cash, H., Rae, C. D., Steel, A. H., & Winkler, A. (2012, November). *Internet addiction: A brief summary of research and Practice*. Current psychiatry reviews. Retrieved May 6, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3480687/>

- Cudo, A., Maçik, D., Griffiths, M. D., & Kuss, D. J. (2020, December 3). *The relationship between problematic Facebook use and early maladaptive schemas*. MDPI. Retrieved May 6, 2022, from <https://dx.doi.org/10.3390%2Fjcm9123921>
- Dahl, D., & Bergmark, K. H. (2020). Problematic internet use: A scoping review – longitudinal research on a contemporary social problem, 2006–2017. *Nordic Studies on Alcohol and Drugs*, 37(6), 497–525. <https://doi.org/10.1177/1455072520941997>
- Díaz-Aguado, M. J., Martín-Babarro, J., & Falcón, L. (2018). *Problematic internet use, maladaptive future time perspective and school context*. *Psicothema*. Retrieved May 6, 2022, from <https://pubmed.ncbi.nlm.nih.gov/29694321/>
- Dogan, H., Bozgeyikli, H., & Bozdaz, C. (n.d.). *Perceived parenting styles as predictor of internet addiction in adolescence*. *International Journal of Research in Education and Science*. Retrieved May 6, 2022, from <https://ijres.net/index.php/ijres/article/view/78/42>
- Fineberg, N. A., Demetrovics, Z., Stein, D. J., Ioannidis, K., Potenza, M. N., Grünblatt, E., Brand, M., Billieux, J., Carmi, L., King, D. L., Grant, J. E., Yücel, M., Dell'Osso, B., Rumpf, H. J., Hall, N., Hollander, E., Goudriaan, A., Menchon, J., & Chamberlain, S. R. (2018, October 10). *Manifesto for a european research network into problematic usage of the internet*. *European Neuropsychopharmacology*. Retrieved May 6, 2022, from <https://www.sciencedirect.com/science/article/pii/S0924977X18303067?via%3Dihub>
- Gupta, A., Khan, A. M., Rajoura, O. P., & Srivastava, S. (2018). *Internet addiction and its mental health correlates among undergraduate college students of a university in North India*. *Journal of family medicine and primary care*. Retrieved May 6, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6131995/>
- Imperatori, C., Innamorati, M., Lester, D., Continisio, M., Balsamo, M., Saggino, A., Fabbriatore M; (n.d.). *The association between food addiction and early maladaptive schemas in overweight and obese women: A preliminary investigation*. *Nutrients*. Retrieved May 6, 2022, from <https://pubmed.ncbi.nlm.nih.gov/29149076/>
- Kaliszewska-Czeremska, K. (2016, February 24). *Modelling excessive internet use: S revision of R. Davis's cognitive-behavioural model of pathological internet use*. *Polish Psychological Bulletin*. Retrieved May 6, 2022, from https://www.academia.edu/22395807/Modelling_Excessive_Internet_Use_s_Revision_of_R_Davis_Cognitive-Behavioural_Model_of_Pathological_Internet_Use

- Kwon, J.-H., Chung, C.-S., & Lee, J. (2009, August 23). *The effects of escape from self and interpersonal relationship on the pathological use of Internet Games - Community Mental Health Journal*. SpringerLink. Retrieved May 6, 2022, from <https://link.springer.com/article/10.1007/s10597-009-9236-1>
- Li, Y. Y., Sun, Y., Meng, S. Q., Bao, Y. P., Cheng, J. L., Chang, X. W., Ran, M. S., Sun, Y. K., Kosten, T., Strang, J., Lu, L., & Shi, J. (2021). Internet Addiction Increases in the General Population During COVID-19: Evidence From China. *The American journal on addictions*, 30(4), 389–397. <https://doi.org/10.1111/ajad.13156>
- Lo, B. C. Y., Lai, R. N. M., Ng, T. K., & Wang, H. (2020, October 22). *Worry and permissive parenting in association with the development of internet addiction in children*. International journal of environmental research and public health. Retrieved May 6, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7660045/>
- Louis, J. P. (2018, February 18). *Clinical psychology: Development of measures for schema therapy*. Clinical Psychology: Development of Measures for Schema Therapy. Retrieved May 6, 2022, from <https://dspace.stir.ac.uk/handle/1893/27350#.YnClrtpBy3D\>
- Louis, J. P., Wood, A. M., & Lockwood, G. (2018). *Psychometric Validation of the Young Parenting Inventory - Revised (YPI-R2): Replication and extension of a commonly used parenting scale in schema therapy (ST) research and practice*. PLOS ONE, 13(11). <https://doi.org/10.1371/journal.pone.0205605>
- McNicol, M. L., Thorsteinsson, E. B. (2017). *Internet addiction, psychological distress, and coping responses among adolescents and adults*. Retrieved May 6, 2022, from <https://liebertpub.com/doi/10.1089/cyber.2016.0669>
- Moazedian, A., Taqavi, S. A., HosseiniAlmadani, S.A., Mohammadyfar, M. A. and Sabetimani, M. 2014. *Parenting Style and Internet Addiction*. J. Life Sci. Biomed. 4(1):9-14.
- Morris, A. (2011) *A Web of Distortion: How Internet Use is Related to Cognitive Distortion, Personality Traits, and Relationship Dissatisfaction*. PCOM Psychology Dissertations. Paper 191.
- Musetti, A., Corsano, P., Boursier, V., & Schimmenti, A. (2020). Problematic Internet Use in Lonely Adolescents: The Mediating Role of Detachment from Parents.

Clinical Neuropsychiatry Journal of Treatment Evaluation, 17(1), 3-10.
<https://dx.doi.org/10.36131%2Fclinicalnpsych20200101>

- Ostovar, S., Bagheri, R., Griffiths, M. D., & Mohd Hashima, I. H. (2021). Internet addiction and maladaptive schemas: The potential role of disconnection/rejection and impaired autonomy/performance. *Clinical Psychology & Psychotherapy*, 28(6), 1509–1524. <https://doi.org/10.1002/cpp.2581>
- Pellerone, M., Iacolino, C., Mannino, G., Formica, I., & Zabbara, S. M. (2017, February 1). *The influence of parenting on maladaptive cognitive schema: A cross-se: PRBM*. Psychology Research and Behavior Management. Retrieved May 6, 2022, from <https://www.dovepress.com/the-influence-of-parenting-on-maladaptive-cognitive-schema-a-cross-sec-peer-reviewed-fulltext-article-PRBM>
- Pellerone, M., Ramaci, T., & Heshmati, R. (n.d.). *The "Mask" filtered by the new media: Family functioning, perception of risky behaviors and internet addiction in a group of Italian adolescents*. Mediterranean Journal of Clinical Psychology. Retrieved May 6, 2022, from <https://cab.unime.it/journals/index.php/MJCP/article/view/2237/pdf>
- Pereira, H., Fehér, G., Tibold, A., Esgalhado, G., Costa, V., & Monteiro, S. (2021, June 29). *The impact of internet addiction and job satisfaction on mental health symptoms among a sample of Portuguese workers*. International journal of environmental research and public health. Retrieved May 6, 2022, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8297207/>
- Poursharifi, H., Bidadian, M., Bahramizadeh, H., & Salehinezhad, M. A. (2011, December 27). *The relationship between early maladaptive schemas and aspects of identity in obesity*. Procedia - Social and Behavioral Sciences. Retrieved May 6, 2022, from <https://www.sciencedirect.com/science/article/pii/S1877042811019264?via%3Dihub>
- Renner, F., Lobbestael, J., Peeters, F., Arntz, A., & Huibers, M. (2012). Early maladaptive schemas in depressed patients: Stability and relation with depressive symptoms over the course of treatment. *Journal of Affective Disorders*, 136(3), 581-590, ISSN 0165-0327, <https://doi.org/10.1016/j.jad.2011.10.027>.
- Shajari, F., Sohrabi, F., & Jomehri, F. (2016). Relationship between Early Maladaptive Schema and Internet Addiction: A Cross-Sectional Study. *Asian Journal of*

Pharmaceutical Research and Health Care, 8(3), 84-91.10.18311/a
proc/2016/4334

Shaw, M., Black, D.W. *Internet addiction: Definition, assessment, Epidemiology and Clinical Management*. CNS drugs. Retrieved May 6, 2022, from <https://pubmed.ncbi.nlm.nih.gov/18399706/>

Spearman's rank-order correlation using SPSS statistics. Spearman's Rank Order Correlation using SPSS Statistics - A How-To Statistical Guide by Laerd Statistics. (n.d.). Retrieved May 6, 2022, from <https://statistics.laerd.com/spss-tutorials/spearmans-rank-order-correlation-using-spss-statistics.php>

Stuart, E. A. *A Psychometric and Experimental Evaluation of Schema Therapy Assessment Measure*. Researchrepository. Retrieved May 6, 2022, from <https://researchrepository.murdoch.edu.au/id/eprint/61821/1/Stuart2021.pdf>

Weishaar, M. E., Young, J. E., Klosko, J. S. (2006). *Schema Therapy: A Practitioner's Guide*. United States: Guilford Publications.

Wiederhold, B. K. (2017). *Beyond direct benefits: Indirect health benefits of social media use*. (n.d.). Retrieved May 6, 2022, from https://www.researchgate.net/publication/312343780_Beyond_Direct_Benefits_Indirect_Health_Benefits_of_Social_Media_Use

Wu, C. S. T., Wong, H. T., Yu, K. F., Fok, K. W., Yeung, S. M., Lam, C. H., & Liu, K. M. (2016, August 18). *Parenting approaches, family functionality, and internet addiction among Hong Kong Adolescents - BMC Pediatrics*. BioMed Central. Retrieved May 6, 2022, from <https://bmcpediatr.biomedcentral.com/articles/10.1186/s12887-016-0666-y>

Yang, W.; Morita, N.; Zuo, Z.; Kawaida, K.; Ogai, Y.; Saito, T.; Hu, W. *Maladaptive Perfectionism and Internet Addiction among Chinese College Students: A Moderated Mediation Model of Depression and Gender*. *Int. J. Environ. Res. Public Health* 2021, 18, 2748. <https://doi.org/10.3390/ijerph18052748>

Yi, X., & Li, G. (2021, December 7). *The longitudinal relationship between internet addiction and depressive symptoms in adolescents: A random-intercept cross-lagged panel model*. MDPI. Retrieved May 6, 2022, from <https://www.mdpi.com/1660-4601/18/24/12869>

APPENDIX I

YOUNG PARENTING INVENTORY-REVISED (YPI-R2)

INSTRUCTIONS

Listed below are statements that you might use to describe your parents and how they treated you. Please read each statement and decide how well it describes your parents. Choose the highest rating from 1 to 6 that describes your father and your mother when you were a child and write the number in the spaces before each statement. If someone substituted as your mother or father, please rate the scale for that person. Give your first impression and move on to the next item. Do not dwell on any item. If you did not have a mother or a father, leave the appropriate column blank.

RATING SCALE:	
1= Completely untrue	4= Moderately true
2= Mostly untrue	5= Mostly true
3= Slightly more true than untrue	6= Describes him/her perfectly

Item No	Father	Mother	Description
1.			Abused me physically: did things like hitting me or throwing things at me.
2.			Worried excessively that I would get hurt.
3.			Did too many things for me instead of letting me do things on my own.
4.			Criticized me a lot.
5.			Had a hard time being playful.
6.			Abused me verbally: did things like calling me names, screaming at me, swearing at me, or threatening me.
7.			Worried excessively that I would get sick.
8.			Made me feel guilty if I did not put his/her needs ahead of mine.
9.			Put a lot of emphasis on my getting good grades and getting ahead in life.
10.			Was demanding; expected to get things his/her way.
11.			Believed that if I was smarter or more talented it made me superior to others who were less so.

12.			Was uncomfortable expressing his/her feelings to others; even to people s/he knew well.
13.			Spoiled me, or was overindulgent, in many respects.
14.			Placed strong emphasis on success and competition.
15.			Would punish me when I did something wrong.

RATING SCALE:

1= Completely untrue

4= Moderately true

2= Mostly untrue

5= Mostly true

3= Slightly more true than untrue

6= Describes him/her perfectly

16.			Would make me feel guilty if I did not go along with him/her.
17.			If I didn't feel like doing a difficult or unpleasant task, I could usually get him/her to do it for me.
18.			Felt uncomfortable being silly and child-like.
19.			Made me feel like the "black sheep" of the family.
20.			Was uncomfortable expressing affection.
21.			Did a lot of things for me because s/he didn't want me to get hurt.
22.			Treated me as if I was stupid or untalented.
23.			Would punish me harshly when I did something wrong.
24.			Expected me to do my best at all times.
25.			Would call me names (like "stupid" or "idiot") when I made mistakes.
26.			Saw me as having little to contribute.
27.			Did not have a sense of humor.
28.			Put me down and made me feel ashamed of myself if I didn't do well.
29.			Saw me as lacking common sense.
30.			Was private; rarely discussed his/her feelings.
31.			Was concerned with social status and appearance.

32.			Overprotected me.
33.			He/she relied more on punishment than praise and rewards.
34.			Treated me as if I was fragile.
35.			Made me feel unloved or rejected.
36.			Put a lot of pressure on me to meet all of my responsibilities.

APPENDIX II

INTERNET ADDICTION TEST

INSTRUCTIONS

This questionnaire consists of 20 statements. After reading each statement carefully, based on the 5-point Likert scale, please select the response (0, 1, 2, 3, 4, or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0 = Not Applicable

1 = Rarely

2 = Occasionally

3 = Frequently

4 = Often

5 = Always

1. ____ How often do you find that you stay online longer than you intended?
2. ____ How often do you neglect household chores to spend more time online?
3. ____ How often do you prefer the excitement of the Internet to intimacy with your partner?
4. ____ How often do you form new relationships with fellow online users?
5. ____ How often do others in your life complain to you about the amount of time you spend online?

6. ____ How often do your grades or school work suffer because of the amount of time you spend online?

7. ____ How often do you check your email before something else that you need to do?

8. ____ How often does your job performance or productivity suffer because of the Internet?

9. ____ How often do you become defensive or secretive when anyone asks you what you do online?

10. ____ How often do you block out disturbing thoughts about your life with soothing thoughts on the Internet?

0 = Not Applicable

1 = Rarely

2 = Occasionally

3 = Frequently

4 = Often

5 = Always

11. ____ How often do you find yourself anticipating when you will go online again?

12. ____ How often do you fear that life without the Internet would be boring, empty, and joyless?

13. ____ How often do you snap, yell, or act annoyed if someone bothers you while you are online?

14. ____ How often do you lose sleep due to being online?

15. ____ How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?

16. ____ How often do you find yourself saying "just a few more minutes" when online?

17. ____ How often do you try to cut down the amount of time you spend online and fail?
18. ____ How often do you try to hide how long you've been online?
19. ____ How often do you choose to spend more time online over going out with others?
20. ____ How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

A study on
IMPLEMENTATION OF FAYOL'S PRINCIPLES IN EVM NISSAN

Project Report

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Under the guidance of

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In partial fulfillment of the requirement for the Degree of

BACHELOR OF COMMERCE



ST.TERESA'S COLLEGE ENTD 1925

ST.TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

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March-2022

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CERTIFICATE

This is to certify that the project titled "A STUDY ON IMPLEMENTATION OF FAYOL'S PRINCIPLES IN EVM NISSAN" submitted to Mahatma Gandhi University in partial fulfillment of the requirement for the award of Degree of Bachelor in Commerce is a record of the original work done by Ms. Ria Nicholas, Ms.Riya Ann Kurien, Ms.Maria Ignatius, under my supervision and guidance during the academic year 2021-22.

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DECLARATION

We, Ria Nicholas, Riya Ann Kurien, Maria Ignatius, final year B.Com students. Department of Commerce (SF), St Teresa's College Autonomous do hereby declare that the project report entitled "A STUDY ON IMPLEMENTATION OF FAYOL'S PRINCIPLES IN EVM NISSAN" submitted to Mahatma Gandhi University is a bonafide record of the work done under the supervision and guidance of Ms.Sneha Abraham, Assistant Professor of Department of Commerce (SF), St. Teresa's College (Autonomous) and this work has not previously formed the basis for the award of any academic qualification, fellowship, or other similar title of any other university or board.

PLACE: ERNAKULAM

DATE: 29/04/2022

RIA NICHOLAS

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RIA NICHOLAS

MARIA IGNATIUS

RIYA ANN KURIEN

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1.1 INTRODUCTION

Management is an activity which is necessary wherever there is a group of people working in an organization. Management helps to see that tasks are completed and goals are achieved with the least amount of resources at minimum cost thus management helps the organization to work effectively and efficiently. According to Henri Fayol management can be defined as “to manage is to forecast and to plan, to organize, to command ,to co-ordinate and to control.” Since business industries are subjected to numerous dynamic changes they are prone to employ more and more workers and introduce diverse departments as a result of this there occurs numerous problems like lack of coordination between departments, improper flow of communication, misinterpretation of commands or orders etc.. In order to overcome these problems Henri Fayol has introduced the 14 principles of management which helps in the effective and efficient work of the organization.

Henri Fayol was the first to identify functions of management – Plan, Organize, Command, Coordinate and Control. According to Fayol all activities of an industrial undertaking could be divided into technical; commercial; financial; security; accounting and managerial. Based largely on his own experience he developed his concept of administration the 14 principle of management propounded by him where published by him in his book *Administration industrielle et generale* (1917) (*General and industrial management* (1949), English). All management principles are equally important. No particular principle has greater importance than the other. They are all required together for the achievement of the organizational goal.

The principles of management allow managers to understand how to run an organization. It also helps them to accomplish tasks and manage situations as and when they arise in the organization. The principles of Fayol are applicable to many organizations and institutions in one way or the other and people use this as a foundation of their managing systems and to increase the effectiveness of organizations. The body of management principles indicates lines along which research should be undertaken to make management practical and more effective. The principles guide managers in decision making and action.

The researchers can examine whether the guidelines are useful or not. Anything which makes management research more exact and pointed will help improve management practice.

1.2 STATEMENT OF THE PROBLEM

Industrial manufacturing began to play an increasingly important role in the economy, since then many experts have developed prepositions about what managers of the organization must do to be able to perform their managerial duties more effectively. One of the most well-known and courted early writers is the late French industrialist Fayol (1949), his theory offers a detailed understanding of different aspects of management, applicable to any organization or department, these principles implement managerial efficiency, thereby contributing to an organization's overall production and revenue generation. It is also an instructional tool for academicians teaching in the field of management. As the pace of the working environment has immensely changed due to the dynamic features and latest technology can these 14 principles be applied in its true meaning in this era?

Hence the study was conducted to evaluate the effectiveness of principles of management in a particular organization and to understand whether these principles are properly implemented or not.

1.3 SIGNIFICANCE OF THE STUDY

The 14 management principles by Henri Fayol are universally accepted guidelines for managers to do their job according to their responsibility. Principles of management provide useful insight to manager, Optimum Utilization of Resources, Scientific Decisions, Effective Administration etc. This study is important because it helps us to know if the principles are properly implemented in the organization and how effective it is in managing the organization and directing it towards the organizational goals. From the knowledge of principles managers get indication on how to manage an organization. The principles enable managers to decide what should be done to accomplish given tasks and to handle situations which may arise in management. These principles make managers more efficient.

1.4 OBJECTIVES OF THE STUDY

The objectives of the study are as follows:

- To understand the effectiveness of principles of management in the business concern.
- To study the practical application of the principles.
- To understand the relevance of principles in present day.

1.5 SCOPE OF THE STUDY

The principles of management allow managers to understand how to run an organization. It also helps them to accomplish tasks and manage situations as and when they arise. The pace of the working environment has immensely changed due to the dynamic features and latest technology; there could be some changes in its application in this new era. The study was conducted to evaluate the effectiveness of principles of management in EVM Nissan and to understand whether these principles are properly implemented or not.

1.6 RESEARCH METHODOLOGY

1. **Source of data:** The study is complied with the help both primary and secondary data.
 - a) **Primary Data:**

Primary data are those collected by the investigator himself for the first time and are original in character. Questionnaire is used for collecting primary data.
 - b) **Secondary Data:**

Secondary data are collected from earlier research work and are applicable in the study the researcher has presently undertaken. Secondary data related for the study was collected from websites, textbooks and journals etc...
2. **Population of the Study:** The study has been conducted among the employees of EVM Nissan.

3. **Sample:** Employees of EMV Nissan Ernakulam branch
4. **Sample Size:** Sample size of the study is 50 employees
5. **Sampling Technique:** Convenience sampling method is used.
6. **Tools of Analysis:** Percentage, Pie charts, Bar Graphs, Weighted Average.

1.7 LIMITATIONS OF THE STUDY

1. Lack of available data.
2. The details provided by the respondents might not be completely genuine.
3. Some of the respondents are not aware of Fayol's principles.

1.8 CHAPTERISATION

Chapter 1- Introduction: This chapter includes introduction of study, statement of the problem, its significance, scope of the study, objectives, methodology, limitations and keywords

Chapter 2- Literature Review: An account of previous studies on the subject is included in this chapter

Chapter 3- Theoretical framework: An account of available literature on the subject is included in this chapter.

Chapter 4- Data Analysis and Interpretation: This chapter comprises of the analysis of the data, their results and interpretations.

Chapter 5- Summary, Findings and conclusion: This chapter focuses on summary, findings and suggestions. It contains the final conclusion of the s

- **McGregor (1960):** The interests of the organization supersede every other interest of staff, individuals, or groups. Imperatively, employees must sacrifice all their personal interests for the good of the organization. In other words, organizations should not tolerate any staff that are not committed to the organization's objectives and order even if it is to the detriment of personal and family interests. This is one hard way of pursuing organizational or corporate success. It may have worked before now, but it is not ideal any longer due to a series of reasons. First, it has shown that employees can do better at work when they are valued and shown a reasonable sense of belonging. Second, organizations are compliant to the inconsistency of change. They change their objectives as situations warrant and need their staff to adapt fast to the changes. And, one of the fastest ways to get staff to adapt and comply with organizational changes is to invest in the staff. Thus, staff training and retraining, which is at most times cost-effective for management, is not only an investment in the staff for the organization to reap but also a commitment to staff personal development. During such training sessions, staff enjoy several benefits such as job security, payment of salaries, full sponsorship, and other allowances that makes staff happy and motivated to put in their best when they return from the training program.
- **Senge,(1990):** Fayol, no doubt, was accurate in his division of work principle in the sense that all jobs cannot be done together by all staff at the same time. Besides, efficiency and effectiveness of work are better achieved if one staff member is doing one thing at a time and another doing a different thing, but all leading to the same collective goal, at the same time. By this, work output can be increased at the end of a given time, especially in a complex organization where different kinds of outputs altogether count for the general productivity of the organization. Similarly, taking the cataloguing room of a library for instance, this principle also mandates that as one or two persons catalogue the books, another puts call numbers on them and another registers the titles as part of putting them together and readying them to move to the circulation wing. Even at that same time, another person at the circulation department may be creating space for their recording, shelving, and so forth. This is division of work and at the end of a day's work, the amount of jobs executed for the day can be more meaningful than when

every staff member is clustered for each of the job elements, one after another. By implication therefore, staff are assigned permanent duties and are made to report to that duty every day. However, as observed in recent library practices, some proactive librarians act contrary to this as they, from time to time, reshuffle staff in a way that takes staff to fresh duties. Critically, the era of staff staying put in a particular office or duty-post is nowadays obsolete given the nature of contemporary society. This point to the fact that current management practices in libraries no longer support that method.

- **Michel J Wells (2000):** Planning, organizing, coordinating, commanding and controlling – these are the elements of management according to Henri Fayol. Less known, but no less important, are Fayol's principles of management. Fayol was born in 1841 and died in 1925. His *Administration Industrielle et Générale* was published in French in 1916 but was not translated into English until 1929. Fayol's work is often quickly rejected either because of its age or because it is believed to have been superseded by observational findings. However, Fayol's work was based on observation. This paper considers some contemporary models of management (Hales, Kotter, and Mintzberg) and argues that Fayol's elements of management are not refuted but are rather reinforced by more recent findings. The paper concludes that Fayol's work stands the test of time. The five elements of management and 14 principles of management are briefly presented.
- **Wren (2001):** Fayol indicates that it is the obligation of all the relevant managers and leaders to note and report all the cases of deviations. Therefore, this management role requires a keen observation of the plans, objectives and basic missions. Developing corrective initiatives for these deviations include another critical undertaking within the controlling role of management. The application of Fayol's principles of management practices still remains eminent. The Fayol's principles are presently applied in various learning institution to explain the basis of management and organizational administration In addition, its practice within various successful corporations and organizations is eminent. Observably, these outlined five functions within the theory assume the normative as well as functional approach to management.

- **Carl A Rodrigues (2001):** Fayol offered 14 principles of management aimed to help managers ascertain what to do to manage more effectively. Currently, service-based and high-tech industries are becoming dominant in some economies, such as the United States. Many organizations in these industries interpret the principles quite differently from the way they were interpreted in Fayol's time. The differences and the cultural challenges managers face in implementing this new framework are presented.
- **Aguolu & Ifidon (2002):** Henry Fayol's first principle for management states that staff performs better at work when they are assigned jobs according to their specialties. Hence, the division of work into smaller elements then becomes paramount. Therefore, specialization is important as staff perform specific tasks not only at a single time but as a routine duty also. This is good to an extent. In library and information centers, there are such divisions of work. The Readers' Services Department of the library (variously called User Services, Customer Services, Public Services, etc.) also divides its vast jobs into departments and units. Not only has this point been substantiated by other writers, it has also been proved to be applicable to Technical Services Departments.
- **Cole (2004):** Fayol theory of classical school of management was based on military context and not in business context and therefore, the theory emphasize on commanding employees rather than directing them. Based on the discussion, Henry Fayol classical theory of management has a wide range of application even in today's business. This is because managers find some of Fayol's principle management relevant when managing the organizations. However, despite having this theory widely accepted, the theory is being criticized because it based on Henry Fayol personal experience during his tenure at coal mining factory. The theory has not been substantiated by any empirical evidence based on research and hence, its credibility is still questionable. However, despite lacking substantial evidence to support this theory, the theory formed a fundamental basis upon which many theories were formed in a bid to identify which is the best practice to manage organization and achieve the predetermined goals and objectives.

- **Lee D.Parker and Philip A.Ritson (2005):** This study argues that in classifying Fayol as a founding father of the Classical Management School, we have to some extent misrepresented this still important management theorist. The received Fayol portrayed in contemporary texts invariably emerges as a caricature of a much more insightful, complex, visionary and rounded management thinker. This study re-examines Fayol's personal and career history, as well as the arguments presented in his original work, *General and Industrial Management*. It finds that he was a much more complex and multidimensional figure than his conventional stereotype today, and that his management theories embraced a wider spectrum of approaches and concepts than traditionally identified with the classical management school of thought. In marked contrast to his traditional portrayal, this study uncovers traces of ideas and concepts that anticipated aspects of the human relations movement, systems-based contingency theory, the movement towards greater employee involvement in decision-making and elements of knowledge management.
- **Wood & Fields (2007):** Managements have presently endeavored to obtain and competitively retain the adequately performing human resources. This reiterates the Fayol's principle regarding the stability of tenure of the human resource. Work initiative must be motivated by the management in order to enhance organizational performance. Esprit De Corps is the last management principle eminent within the Fayol's concept. According to this principle the management must motivate peace and inspire workers to stay in a state of good feelings. Generally, it is notable that the Fayol principles on management have been widely applied within present organizations.
- **Wood & Field (2007, p.269):** Fayol observed the close association between authority as well as responsibility. In his argument, Fayol indicates authority as the competency to provide directives and exact obedience from the followers or subordinates. On the other hand, responsibility entails the act of being accountable. According to Fayol, these two elements closely relate to each other. Any manager with authority has to exercise certain levels of responsibility.

- **Nnadozie (2007):** This paper has critically analyses the 14 principles of management' proposed by Henri Fayol (Fayol, 1949). Some of the principles have been redefined and re- interpreted in recent management research to become better and more effective to organizations in their application. Yet a few others have remained as Fayol postulated them and are still widely adopted in the management of today's organizations. Generally, all organizations are similar in some ways in the context of management as a practice. The issue of categorization of organizations, whether profit or non-profit, into manufacturing, marketing, sales, or services as products, does not demean the need for management in all types of organization. A library and information Centre is not different and therefore should also be treated as a business organization. As a sequel to this, this paper has presented a modification or adaptation of each of Fayol's 14 principles meant to guide managers of library and information centers. The principles are borne out of discourse on Fayol's 14 principles of management.
- **Sapru (2008):** Fayol outlines other fourteen overall management principles. Indicatively, the 14 principles provide normative guidance regarding the manner in which manager may implement the basic five managerial roles in an effective manner There is great importance is outlining these basic principles identified by Fayol regarding managerial roles. Particularly, this examination is important during this era of globalization, which has led to a remarkable increase in organizational and business competitiveness. Fayol describes the basic principles have to conduct basic planning is one of the highlighted roles of management. As Fayol outlines, managers have to conduct basic planning roles. This is applicable for the future conditions. The development of strategic objectives is objectively important for proper organizational performance. This is particularly in order for organisation to secure the accomplishment for the future organizational objectives. Therefore, as Fayol indicates, it is important for all the managers and other organizational leaders to evaluate their potential for future achievements. Future contingencies likely to influence organization and consequently transform their operational and strategic orientations are important. Consequently, these must be well planned for.

- **Wren & Bedeian (2009):** It is evident that the increasing organizational competitiveness has also imparted significant pressure on employee's engagement and welfares. Therefore, the available HR has become competitive to hire and maintain. For these reasons, organizations are more skewed towards the utilization of comprehensive approaches to management and practice. In this demand, the Fayol's principles have increasingly become pertinent and applicable in both management and practice and teaching. However, due to more complicated management situations, most organizations also apply this principle in combination and synergy with other effective management theories.
- **Mildred Golden Pryor and Sonia Taneja (2010):** Fayol's theories were the original foundation for management as a discipline and as a profession. Also Fayol was the first to advocate management education. Yet he has critics who revile him (or at least disparage his work) as well as followers who respect and revere him. The paper intends to enlighten today's practitioners and academicians about the relevance and value of Fayol's theories today. Fayol's theories are valuable and relevant for organizational leaders because Fayol was a practitioner who documented theories that worked best for him and his co-workers. While there are those who criticize Fayol's theories, there are many others who respect them and find them useful as academicians and as practitioners. The theory of management functions aligns well with strategic leadership and management models and theories.
- **Sahni and Vayunandan (2010):** Henry Fayol emphasized that managers should possess the six the primary qualities of effective management in order to conduct management functions more effectively. He argued that, for managers to apply the six concepts of management they must be in a position to define what they intend to achieve within a predetermined time frame. Managers should also create the authority lines through which there is efficient flow of commands. The commands should further be issued such that, the entire organization is set towards execution of those activities

- **Uzuegbu C.P and Nnadozie C.O (2015):** This paper has critically analyses the ‘14 principles of management’ proposed by Henri Fayol (Fayol, 1949). Some of the principles have been redefined and re-interpreted in recent management research to become better and more effective to organizations in their application. Yet a few others have remained as Fayol postulated them and are still widely adopted in the management of today’s organizations. Generally, all organizations are similar in some ways in the context of management as a practice. The issue of categorization of organizations whether profit or non-profit, into manufacturing, marketing, a sale, or services as products, does not demean the need for management in all types of organization.
- **Ramakrishna N and Dr.Shivappa (2019):** Principles of Management as developed by Henry Fayol are among the notable classical theoretical frameworks of management applicable to all types of organizations today. Present objective of this study is to pursue an understanding of the utility of Henry Fayol’s fourteen principles of management and in particular employee oriented principles i.e., Unity of Command, Remuneration to employees, Equity, Stability of Personnel, Initiative, Division of work and Espirit De Corps and its application in Human Resource Outsourcing and in Particular Contract Staffing. Secondary data is used where an extensive review of published works on management generally, and Human Resource Outsourcing and Contract Staffing in particular, was conducted. This yielded vital insights on the original meaning of employee oriented Fayol’s principles of management and as well as their application in the Human Resource Outsourcing and in particular Contract staffing of various organizations. Illustrations and Inferences were drawn from both developed and developing countries to give the paper a global perspective. Based on available literature, it was concluded that Fayol’s employee oriented principles of management are relevant to all types of organization however the same principles are not applied in Contract Staffing.

INTRODUCTION

Management as a subject of study has developed in recent years. Various scholars have contributed significantly to developing these subjects as a course of study that is taught in high schools and colleges as a professional career.

Henri Fayol is one of such famous academicians who have given his famous 14 principles of management. He had proposed these theories in the early 20th century that hold very true and are important in the management in business settings of the world today. In industries or manufacturing units many individuals are employed for the production of the final product. It has been observed in such settings that the employees or labourers are not efficient in every department of the work division.

From the knowledge of principles, managers get indication on how to manage an organization. The principles enable managers to decide what should be done to accomplish given task and to handle situations which may arise in management. These principles make managers more efficient. It makes the role of manager's concrete. Therefore these principles act as ready reference to the managers to check whether their decisions are appropriate. Besides these, principles define managerial activities in practical terms. They tell what a manager is expected to do in specific situation.

HISTORY

Henry Fayol was born in a suburb of Istanbul, Turkey in 1841. His father, an engineer, was appointed as building supervisor for the construction of a bridge over the Golden Horn (Galata Bridge). The family returned to France in 1847. He studied mining engineering at the 'Ecole Nationale Supérieure des Mines' academy in Saint-Étienne. Henry Fayol started his career as an engineer at the mining company Compagnie de Commentry Fourchambeau Decazeville in Commentry over 1000 people. He was very successful in the position for over 30 years (until 1918). Around 1900 the mining company was one of the largest producers of iron and steel in France. At that time this industry was considered to

be vital for France. In addition to being the managing Director of the Commentry-Fourchambault mining company (1900), Henri Fayol was also one of the founders of the principles of modern management. Henry Fayol (29 July 1841 – 19 November 1925) was a French mining engineer, mining executive, author and director of mines who developed general theory of business administration that is often called Fayolism. He and his colleagues developed this theory independently of scientific management but roughly contemporaneously. Like this contemporary, Frederick Winslow Taylor, he is widely acknowledged as modern management methods. Henri Fayol, a French industrialist, is now recognized as the father of modern management. In the year of 1916 Fayol wrote a book entitled “Industrial and general Administration”. In this book he gave the 14 principles of management. Henry Fayol’s management theory is a simple model of how management interacts with personnel. Fayol’s management theory covers concepts in a broad way, so almost any business can apply his theory of management. Today the business community considers Fayol’s classical management theory as a relevant guide to productively managing staff. 14 principles of management are statements that are based on a fundamental truth. The principle of management serves as a guideline for decision-making and management actions. They are drawn up by means of observations and analyses of events that managers encounter in practice.

FEATURES

1. Universality of Application:

The principles of management are universally applicable. These principles are applied to all kinds of organizations around the world from governments to businesses and non-profit units regardless of their size or scale. Only the nature of their application and the method of application changes whereas the concept remains. An instance to understand this is the extent of decentralization in an organization. Certain types of businesses may require a high degree of centralization with the requirement of concentration of decision making and certain business may require less scale of centralization, this varied application of scale however does not take away the application of the principle of decentralization.

2. General Guidelines

Management principles are naught but general guidelines or propositions and are not issue specific. That is, these guidelines are not ready made for different business situations and must be used using diligence and intellect after understanding the situation. These principles such as for instance, “*Firm before Department*” might help in easy resolution of business problems. The principle now quoted can resolve an interdepartmental conflict by reminding the departmentheads that, the department is secondary to the firm.

3. Result of Observation and Experimentation:

Management principles were not formulated overnight and are a result of continuous observation and experimentation carried out in a work place by skilled managers over many years. The principle of division of labour was formulated seeing the efficiency it brought about through specialization and accountability. In a like manner, all principles are developed over a courseof time.

4. Flexibility:

The principles of management are not rigid or concrete. Their application differs from situation to situation. For instance, the principle of division of labour may not be applicable when the work to be done is indivisible and forms a concrete whole. These principles are applied by the managers after giving due regard to the conditions of their applicability.

5. Behavioral in Nature:

Most of the principles of management revolves around the behavior of humans and aims at influencing this behavior. These principles try to bring about a better understanding of the relation between humans and material resources in accomplishing organizational goals.

6. Establishes Cause and Effect Relationship:

This is an important feature of the principles of management. These principles are intended to establish a relationship between what causes something such as an event or action and the effect of that event or action on something else. The importance of establishing this is because many situations can be so understood on the basis of the understanding of the effect. For instance, division of labour causes specialization which creates the effect of efficiency. So such an understanding entails that if division of labour is applied to divisible work efficiency can be achieved.

7. Contingent:

The principles of management are contingent on a applicable situation prevailing or existing for its application. The application of these principles thus change according to changing conditions, and a new principle may be applied in the place of an existing one when the conditions changes.

IMPORTANCE

1. Provides insights:

Management principles play a key role in providing insights to facilitate efficient decision making. These principles add to their knowledge and ability to deal with various situations and also help in handling recurring contemplated problems. Thus it plays a role in increasing managerial efficiency.

2. Optimal Utilization of Resources:

Resources are the life blood of a business. Its optimal usage is a sine qua non for the success of a business. Management principles help in ensuring optimal usage by laying down broad frameworks on how to use these resources and how not to. This when applied in proper situations can make for efficient resource decisions. These principles are also applicable to resource collection or organization, so as to prevent wasteful accumulation of scarce resources.

3. Effective administration:

Administration of a business is a part and parcel of management. Principle of management plays a key role in administering the business by helping in the regulation of human resource among each and also by prescribing norms of relations. These norms when followed leads to established beneficial results. For example, decentralization as a principle helps in administration by giving adequate power to many units across the business to ensure compliance and efficiency.

4. Scientific Decisions:

The decisions made by following these principles are scientific decisions. It is scientific in the sense that it is made with due regard to logic, reason and facts and it is rational. Rational decisions always ensure efficiency within a business and helps in its success.

5. Adapting to Changes:

Management principles as already mentioned are general guidelines which are to be applied differently in different situation. Different management principles are contemplated for different situation thereby allows adapting to changes.

BENEFITS

1. Facilitates Organizational Structure:

One of the keys of the Henri Fayol 14 principles of management is the organizational structure. Fayol talked about a hierarchical structure in which the top levels of management act as forceful leaders. While this was standard procedure in his mining company, the hierarchical structure is still the model for many small businesses today. Although more companies are adopting a flat structure, the top-down model as described by Fayol remains popular as a means of ensuring that decisions are implemented from senior level to the rank-and-file.

2. Promotes the Team Concept:

Although there are advantages and disadvantages of administrative management, one of Fayol's lasting theories were the idea that employees should subordinate their private interest to the general interest of the company. This is a foundational theory of the team concept that has become so prevalent in many small businesses. Rather than having employees work individually on projects, many companies group workers with diverse skills and talents into a team. This helps shore up any weaknesses because employees with opposing talents work together to make up for each other's deficits.

3. Motivates Employees Through Fair Compensation:

While the Fayol's advantages and disadvantages are still debated one theory that continues to prove true is the idea that business leaders must compensate employees in a manner that motivates them to perform above standard. Salaries and wages are always a delicate subject, especially as it relates to gender pay equality. Fayol however, went further than just talking about money, believing that non-monetary compensation was equally important.

DISADVANTAGES

Fayol based his work on his own experiences in management and not on any empirical research. It is myopic and very inward looking, not giving any consideration to customer needs. This result in organizations structured to service the need of the organization. It would be better if the organization was structured to service the needs of the customer. Fayol created the model in a very different time. The command and control model doesn't work so well with today's knowledge workers. Today the focus needs to be on encouraging creativity, innovation, and problem solving amongst the team.

PRINCIPLES OF MANAGEMENT

1. DIVISION OF WORK

The principle of 'Division of Work' means to divide a given activity or work into small pieces or parts so that each part is handled with great ease and efficiency. This principle states that every work should be divided into the smallest possible part and each such part is to be performed by an individual person (labourer). Instead of assigning the whole work to an individual, it's better to assign one task to one person. Before assigning the task to anyone it must be assured that he possesses the required knowledge, skill, capability and will to perform the task effectively and efficiently. If the same task is performed by a person again and again he gains specialization in that task and can perform with greater ease and minimizes wastage of resources and time. Fayol has emphasized on this issue because specialization and minimization of wastage is a key to success for each and every organization. He was of the view that every work should be divided into the smallest possible part and then is to be assigned to an individual to gain success and specialization. This principle also guarantees specialization, efficiency and maximum production with minimum time and least efforts.

Positive impacts of this principle:

- Specialization
- Minimization of wastage
- Improved efficiency.

Consequences of violation of this principle:

- Overburden on a single employee
- Conflicting situations
- Wastage of time and resources
- Chaos and confusion.

2. AUTHORITY AND RESPONSIBILITY

Authority and responsibility are closely related and this principle states that these two must go hand in hand. It means that proper authority should be delegated to meet the responsibilities. A match should be there between these two because of two main reasons:-- This is an important and useful principle of management because if adequate authority is not delegated to the employees they cannot discharge their duties with efficiency and this in turn will hamper the achievement of the organizational goal. Sometimes the relation between management and employees is also badly effected by non-delegation of proper authority.

Positive impacts of this principle:

- No misuse of authority.
- Helps to complete job effectively and efficiently.
- Individuals can be held accountable.
- Systematized and effective achievement of organizational objectives.

Consequences of violation of this principle:

- Misuse of authority.
- Responsibility can't be discharged effectively.
- No one can be held accountable.
- Conflicts between management and employees.

3. DISCIPLINE

Discipline means obedience, respect for authority, and observance of established rules. Fayol has emphasized that a sense of discipline should be present in all employees of the organization at all level so that the organization can perform and achieve its objectives in the best possible way.

Positive impacts of this principle:

- Helpful in achieving organizational objectives.
- Improved efficiency.
- Cordial relation between management and employees.
- Better working environment in the organization.
- Minimization of wastage.

Consequences of violation of this principle:

- Height of disorders.
- Confusion and chaos.
- Wastage of time and resources.
- Conflicting situations.

4. UNITY OF COMMAND

Unity of Command means getting orders/ command from only one supervisor. Fayol has stated “As soon as two superiors impose their authority over the same person or department, uneasiness makes itself felt. Dual command is a perpetual source of conflict.” This principle states that an individual should get orders from a single superior so that he does not get confused and can discharge his duties effectively.

Positive impacts of this principle:

- Prevents dual subordination
- Easy to fix responsibility to an individual
- Harmonious and cordial relation among the management and the employees
- Performance of the employees will increase.

Consequences of violation of this principle:

- Reduces efficiency of subordinates.
- Creates confused situation for the subordinates.
- Subordinates can easily escape from their responsibility and duties.
- Ego clash between managers.
- Overlapping of orders and instructions.
- Hard to maintain discipline in the organization.

5. UNITY OF DIRECTION

This principle states ‘One Head One Plan’. It means that all the employees having same objective must be directed towards the achievement of the common goal and thus must have one head and one plan. This principle makes it necessary that there should be unity of action

Positive impacts of this principle:

- Efficient achievement of organizational objective.
- Better coordination among the employees.
- Efforts of employees are directed in a better way.
- Systematic working environment is developed in the organization

Consequences of violation of this principle:

- Decrease in organizational efficiency
- Lack of coordination.
- Wastage of resources.
- Difficulty in achievement of organizational objective.
- Duplication of activities.

6. SUBORDINATION OF INDIVIDUAL INTEREST TO GENERAL INTEREST

This principle states that general interest is superior to the individual interest. And the manager must try to integrate the individual goal with the organizational goal in such a manner so that both the objectives are accomplished with efficiency and effectiveness. The manager directs the employees in such a manner that they work for their objective and ultimately the organizational objective is achieved.

Positive impacts of this principle:

- Achievement of organizational objective.
- Coordination between individual and organizational goal.
- Harmony in the organization;
- Increases employee's respect for the organization.

Consequences of violation of this principle:

- Difficulty in achievement of organizational goal.
- Conflicting situations in the organization.
- Wastage of efforts, time and resources.
- Delay in Work.

7. REMUNERATION OF EMPLOYEES

Fayol is of the view that each employee must get fair remuneration so that the employee as well as the owner gets the same amount of satisfaction. The remuneration system must be such which provides for the adequate remuneration to the employees, motivates the employee to perform better, and may ensure safety & security, raise standard of living of the employees.

Positive impacts of this principle:

- It creates good relation between workers and management
- Employees get motivated.
- It declines the labour turnover rate
- Employees feel satisfied with their wages and thus contribute their best effort.
- It raises the standard of living of the employees.
- It develops the society indirectly

Consequences of violation of this principle:

- Employee's efficiency decrease.
- Conflict between management and employees.
- Labour turnover rate will be more.
- The immediate result is incomplete work.
- Hard to achieve organizational objective.

8. CENTRALISATION AND DECENTRALISATION

When the power to take decision rests with the top management it is called as 'Centralization'. When the power to take decision is given to the person performing the job it is called as 'Decentralization'. Fayol is of the opinion that there should be a proper balance between centralization and decentralization. An organization must not be completely centralized or decentralized; there should be a match between the two depending upon the size, nature and location of business. **Positive impacts**

of this principle:

- Facilitates proper functioning of the organization.
- Timely completion of work.
- No extra burden on the top management.
- Motivates the lower level employees.
- Decisions will be taken at the level of action.

Consequences of violation of this principle:

- Over burden on the top management.
- Difficulty in the achievement of organizational objective.
- Delay in action, because the decisions of top management are to be waited.
- Sometimes it creates conflict between the management and the employees.
- Ego clashes in case of different decision by lower level and top level management.

9. SCALAR CHAIN

Fayol emphasized that every information in the organization must flow according to this chain to facilitate clear communication of orders of the superiors and feelings of the subordinates. This chain must be strictly followed in the organization. Fayol also stated that there should be no overlapping of steps during the communication process. Gang plank: For overcoming this limitation of scalar chain, Fayol introduced the concept of 'Gang Plank'. According to this concept, two executives of the organization of different department at the same level can communicate directly in case of emergency, so that speedy decisions and actions could be taken. In case of the above example, if employee 'C' has to contact employee 'G', he can easily and directly communicate the information to 'G' using this Gang plank ('C'4'G'). This reduces a lot of time and helps in effective performance.

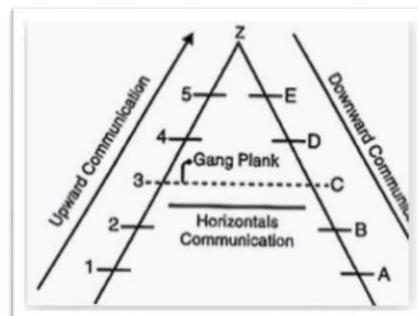
Positive impacts of this principle:

- Clear communication of information.
- Better relation among employees.
- Systematic communication in the organization.
- Faster solution to organizational problems.

Consequences of violation of this principle:

- Bitterness in the relation of employees because of ignoring the close supervisors.
- Improper communication of information;
- Difficulty in finding the responsible person.

Figure 3.1



Gang Plank

Gang Plank/Fayol's Ladder: This principle was explained by Fayol with the help of a ladder diagram which showed the flow of information. For example, in an organization there are employees A, B, C, D, E, F, G, H, I, at various posts. If employee 'C' has to communicate with employee 'G' using the scalar chain, the route should be like C4B4A4F4G. Thus there will be four steps for the information to reach from employee 'C' to the employee 'G'.

10. ORDER

This principle states that there should be a proper order for everything. Fayol is of the view that in every organization there should be a fixed place for everything to facilitate smooth working and avoid wastage of resources.

Positive impacts of this principle:

- No wastage of time and energy.
- Better handling of resources.
- Smooth and systematic working in the organization.
- Increased productivity.
- Efficiency in work.
- Proper use of financial resources.

Consequences of violation of this principle:

- Delayed operations.
- Scattered physical and human resources.
- Wastage of time and energy.
- Wastage of financial resources.
- No proper accountability.
- Reduction in efficiency of controlling process.
- Reduced operational efficiency.

11. EQUALITY

Equality is the condition or quality of being equal. It means the applicability of same rules and regulations for all employees in the organization irrespective of their religion, sex, caste, colour, creed, language, nationality, grade, position etc. This principle is based on the basic thought that “all employees of the organization are equal”. This principle states that each and every employee in the organization should be treated with equality and in a just and fair manner. There should not be any discrimination on any ground with any employee of the organization. The Executive Officer must be fair and unbiased while dealing with his subordinates

Positive impacts of this principle:

- Employees feel satisfied.
- Ensures just and fair treatment to all.
- Motivate employees.
- Ensures loyal tyofemployees towardsorganization.
- Ensures cordialrelationship among employees and management.

Consequences of violation of this principle:

- Dissatisfaction among employees.
- Delay in the achievement of organizational objective.
- Lack of respect towards superiors and work.
- Lack of team spirit.
- Hinders employee-management relationship.

12. STABILITY

Stability means no frequent change, termination and transfer etc. It means that, in an organization whenever an employee is appointed for a job, he/she shouldn't be removed from that position frequently. The management of the organization should ensure that there must be stability in the job and frequent changes and shuffling of position should be avoided.

Positive impacts of this principle:

- Develops sense of belonging-ness towards the organization.
- Improves the efficiency level of employees.
- Minimizes the wastage of resources.
- Employees satisfaction.
- Better accountability.
- Saves time.

Consequences of violation of this principle:

- Non-achievement of the organizational objectives.
- Lack of employees participation.
- Wastage of resources and time.
- Dissatisfaction
- Adds to cost.

13. INITIATIVE

Initiative means to start, to begin or to instruct in a project. Here, in this principle Fayol suggested that each employee should be given an opportunity to take some initiative in framing the functional plan as well as in determining the steps to be taken at each level for proper execution of the plan.

Positive impacts of this principle:

- Timely achievement of objectives when they are set in consultation with employees.
- Develops sense of belongingness in employees.
- Ensure maximum participation of employees.

Consequences of violation of this principle:

- Employees will feel that the plans and goals are not for their benefit and thus will not work with full potential.
- Lacks maximum participation from employees.
- Conflict between the management and employees.

14. ESPRIT DE CORPS

ESPRIT DE CORPS here means team spirit and team work. This principle emphasizes on team work. 'UNITY IS STRENGTH' is the essence of this principle. Fayol suggested that there should be a team spirit in the organization and all the employees must consider themselves as member of the organization.

Positive impacts of this principle:

- Achievement of group goals.
- Development of team spirit.
- High morale of employees.
- Cooperation and coordination in the organization.

Consequences of violation of this principle:

- Non-achievement of the organizational objectives.
- Conflicting environment in the organization.
- Lacks maximum participation from employee.

COMPANY PROFILE

Established in 1952 as a small entrepreneurial group with a turnover of Rs.10, 000 today EVM Group has gone on to become one of the most established networks of diverse companies. Right from our humble beginning through the hard work of over six decades, EVM has dared to dream big and dominate various business sectors while keeping with our primacies to maintain a customer-focused, value- based business capable of rising up to new challenges.

Established in the year 2009, EVM Cars in Maradu, Ernakulam is a top player in the category Car Dealers Nissan in the Ernakulam, This well-known establishment acts as one stop destination servicing customers both too and from other parts of Ernakulam. Over the course of its journey, this business has established a firm foothold in its industry. The belief that customer satisfaction is as important as their products and services, have helped this establishment garner a vast base of customers. which continues to grow by the day. This business employs individuals that are dedicated towards their respective roles and put in a lot of effort to achieve the common vision and larger goals of the company. In the near future, this business aims to expand its line of products and services and cater to a larger client base, in Ernakulam, this establishment occupies a prominent location in Maradu. It is an effortless task in commuting to this establishment as there are various modes of transport readily available. It is known to provide top service in the following categories: Car Repair & Services-Nissan, Car Repair & Services- Nissan (Authorized), Car Repair & Services-Nissan Teana, Car Repair & Services Nissan Micra, Car Repair & Services-Nissan Micra (Authorized), Car Repair & Services-Nissan Teana (Authorized).

HISTORY

Founded in 1933, Nissan Motor Co., Ltd. has become one of the world's best-known brands in the automotive industry. Employing 125,000 people worldwide, the company and associated brands design, produce and sell over 2.5 million passenger cars and commercial vehicles in more than 190 countries. In Kerala, EVM Nissan started its operations in 2009 and expanded over north and central Kerala with 5 full-fledged dealerships. Over the years EVM Nissan emerged to be

among the top dealerships of Nissan in India with market leadership in certain pivotal segments of the vehicle market. Its Network included 5 Sales centers and 10 service centers. By developing a positive relationship with our customers, business partners, stakeholders, employees as well as the community we add value through the effective functioning of our Dealerships. Nissan Service Hub, Our constant endeavor to serve you better each time, we keep upgrading and enhancing our services. With no compromises on the quality of work, we offer you a transparent and affordable car service. So that, you get the exact price of service much in advance.

Nissan has entered an exciting phase of growth and development, as the Nissan Revival Plan has succeeded beyond expectations—meeting its commitments one year ahead of schedule.

The company now moves ahead strongly with NISSAN 180, a bold new plan to increase the number of vehicles sold improves profitability and eliminates debt. It heralds an exciting new age in which 28 new vehicles featuring winning design and a range of cutting-edge technologies will enter the Nissan lineup.

VISION

Nissan: Enriching people's lives.

MISSION

Nissan provides unique and innovative automotive products and services that deliver superior measurable values to all stakeholders* in alliance with Renault.

TAGLINE:

It's Your Turn to Drive

Innovation that Excites

Shift the way you Move.

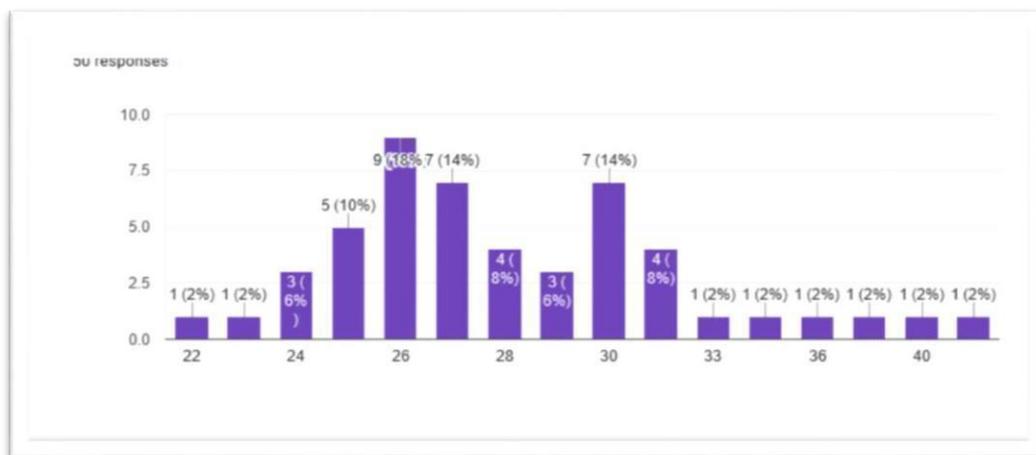
4.1 AGE OF RESPONDENTS

Table 4.1 Age of Respondents

Age	No. of Respondents	Percentage
20-25	5	10%
25-30	28	56%
30-35	12	24%
35-40	3	8%
40-45	1	2%
45-50	1	2%
Total	50	100

Source: Primary Data

Figure 4.1



INTERPRETATION

From the above data we can infer that majority of the employees in the company belong to the 25-30 age class.

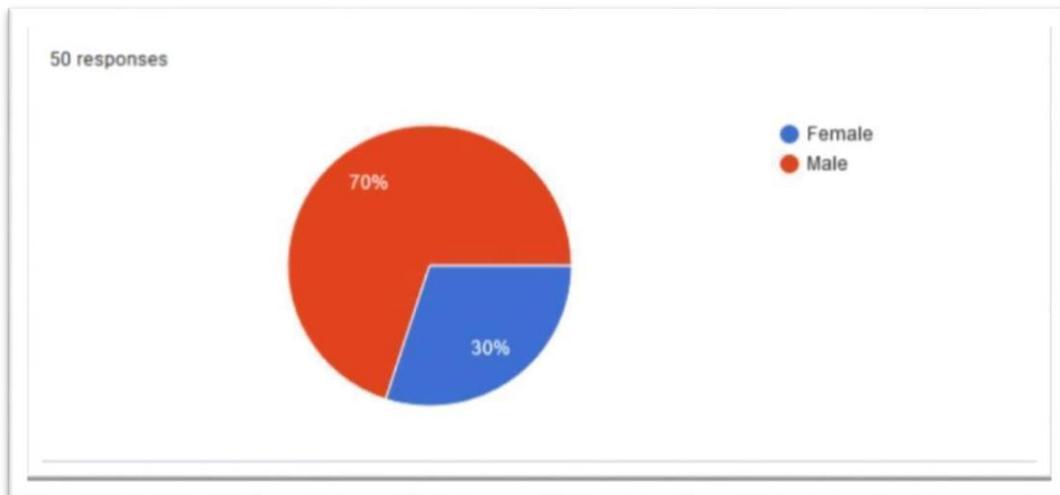
4.2 GENDER

Table 4.2 Gender

Gender	No. of Respondents	Percentage
Female	15	30
Male	35	70
Total	50	100

Source: Primary Data

Figure 4.2



INTERPRETATION

Respondents here are grouped on the basis of their gender. Out of the 50 respondents, 70% of the respondents are male employees and 30% of the respondents are female employee

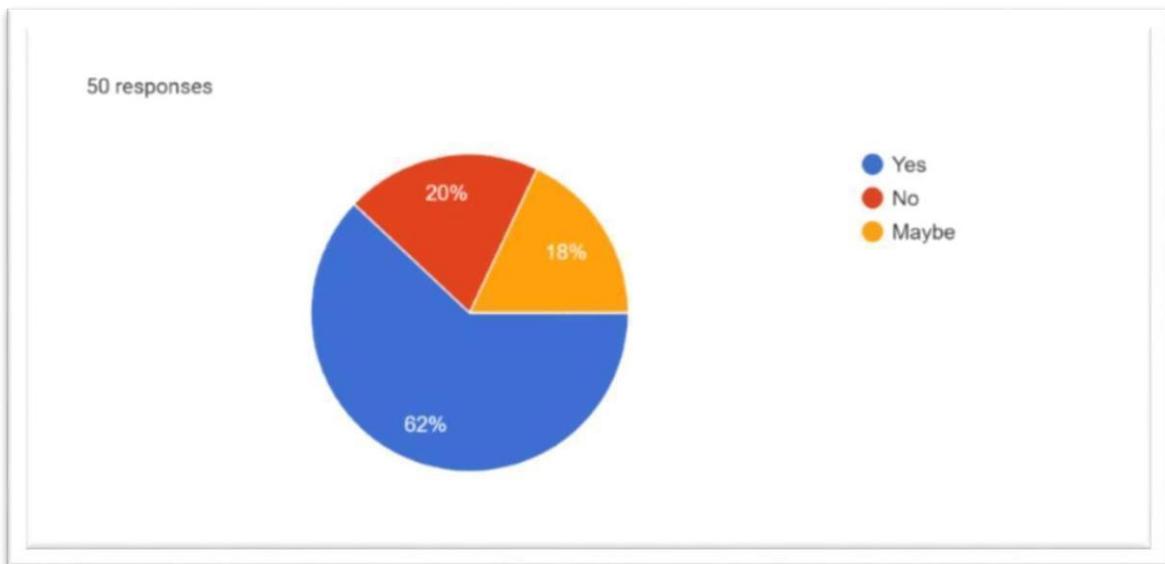
4.3 FAMILIARITY WITH FAYOL'S PRINCIPLE

Table 4.3 Fayol's Principle

Responses	No. of Respondents	Percentage
Yes	31	62%
No	10	20%
Maybe	9	18%

Source: Primary Data

Figure 4.3



INTERPRETATION

From the above-mentioned data, we can understand that 62% of the employees are aware of Fayol's principles, 18% have partial knowledge and the rest are unaware of the concept.

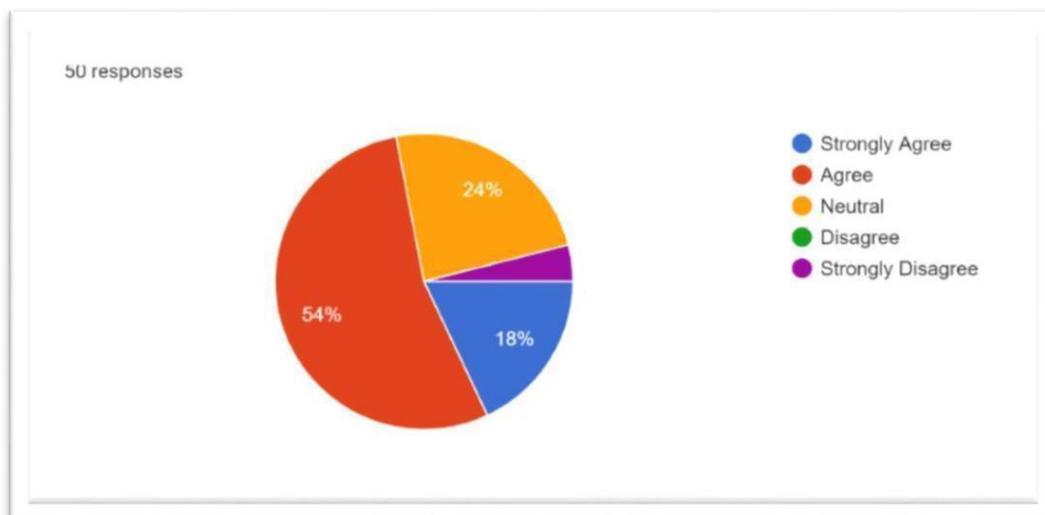
4.4 PROVISION OF WORK

Table 4.4 Provision of Work

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	9	5	45	18%
Agree	27	4	108	54%
Neutral	12	3	36	24%
Disagree	0	2	0	0%
Strongly Disagree	2	1	2	4%
Total	50	15	191	100

Source: Primary Data

Figure 4.4



INTERPRETATION

From the above mentioned data, we can infer that only 18% of the employees strongly agree that there is proper equipment. 54% agree with the fact that proper equipment is provided, 4% completely disagree and the rest 24% stands in a neutral position.

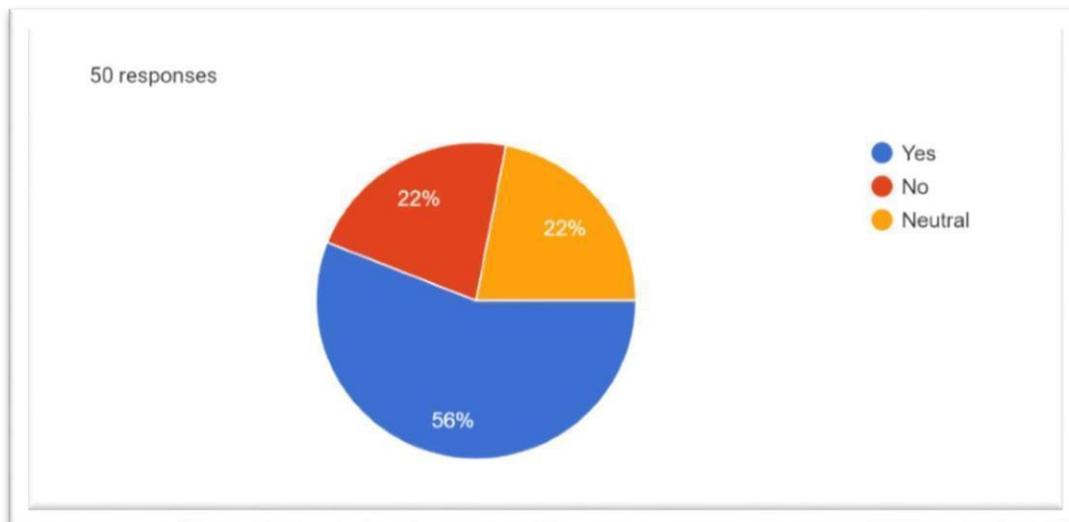
4.5 RULES AND REGULATIONS

Table 4.5 Rules and Regulation

Responses	No. of Respondents	Percentage
Yes	28	56%
No	11	22%
Neutral	11	22%
Total	50	100

Source: Primary Data

Figure 4.5



INTERPRETATION

From the above mentioned data, we can infer that, only 56% are satisfied with the rules and regulations of the company, 22% are not satisfied and the rest stands in a neutral position.

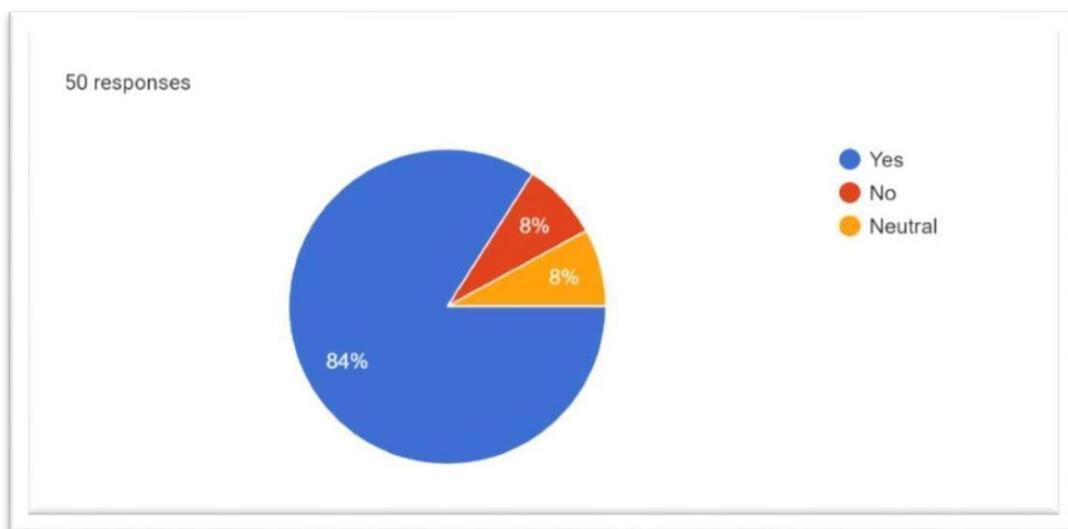
4.6 CLARITY REGARDING PRIMARY OBJECTIVES

Table 4.6 Primary Objectives

Responses	No. of Respondents	Percentage
Yes	42	84%
No	4	8%
Neutral	4	8%
Total	50	100

Source: Primary Data

Figure 4.6



INTERPRETATION

From the above-mentioned data, we can understand that 84% of the employees have a clear understanding of the company's and 8% have no idea and the rest have no clear understanding.

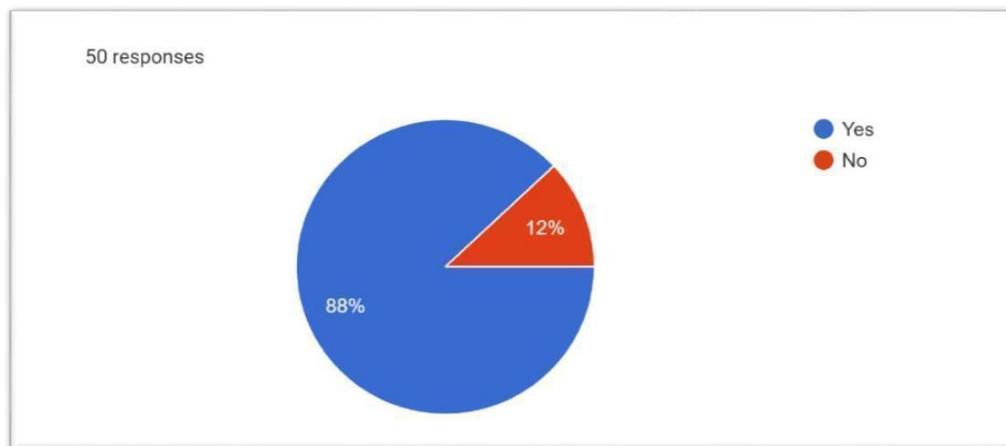
4.7 MOTIVATION PROVIDED

Table 4.7 Motivation

Responses	No. of Respondents	Percentage
Yes	44	88%
No	6	12%
Total	50	100

Source: Primary Data

Figure 4.7



INTERPRETATION

From the above data we can infer that 88% agree that there is proper motivation and rest 12% disagree.

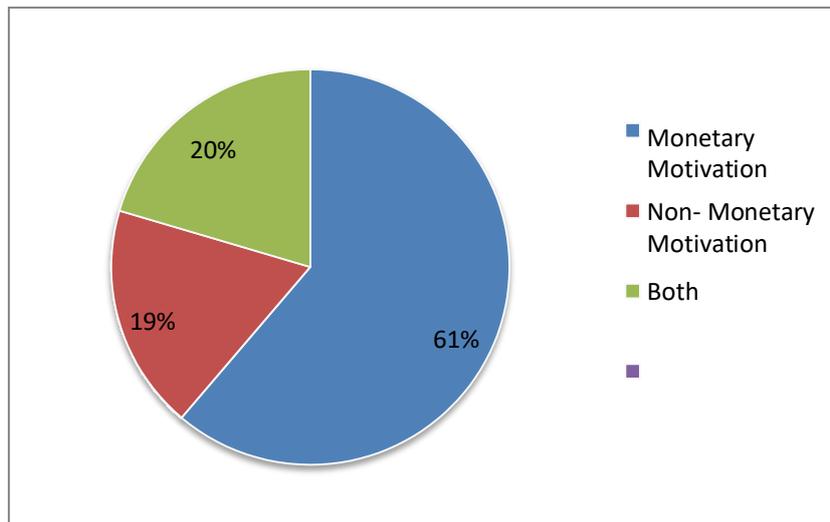
- MOTIVATIONAL FACTORS**

Table 4.8 Motivational Factors

Factors	No. of Respondents	Percentage
Monetary Motivation	30	61
Non-Monetary Motivation	9	19
Both	10	20
Total	49	100

Source: Primary Data

Figure 4.8



INTERPRETATION:

From the above data we can infer the 61% of the employee receives monetary motivation, 19% receives non-monetary motivation and only 20% gets both.

- **MONETARY MOTIVATIONAL FACTORS**

Table 4.9 Monetary Motivational Factors

Monetary Motivation	No. of respondents	Cumulative frequency
Salary increment	27	27
Bonus	16	43
Commission	10	53
Incentives	31	84
Not Applicable	4	88

Source: Primary Data

INTERPRETATION

The above data shows how the monetary motivational factors are distributed among the employees. From this we can infer that most of the employees get more than one monetary motivational factor.

- **NON MONETARY MOTIVATIONAL FACTORS**

Table 4.10 Non-Monetary Motivation Factors

Non-Monetary Motivation	No. of respondents	Cumulative frequency
Promotion	21	21
Flexible Working Hours	16	37
Extra Leave	11	48
Job Security	19	67
Not Applicable	10	77

Source: Primary Data

INTERPRETATION

In similar to monetary motivational factors (Page No 40), more than one of the above mentioned non-monetary motivational factors are given to the employees

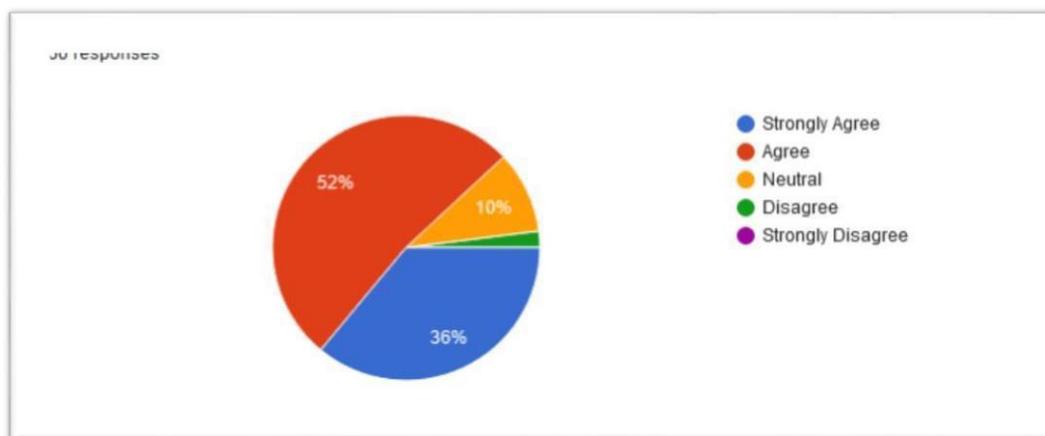
4.8 UNITY OF COMMANDS

Table 4.11 Instructions

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	18	5	90	36%
Agree	26	4	104	52%
Neutral	5	3	15	10%
Disagree	1	2	2	2%
Strongly Disagree	0	1	0	0%
Total	50	15	211	100

Source: Primary Data

Figure 4.11



INTERPRETATION

From the above data we can infer that 36% of the total workers strongly agree that they are getting instructions from their respective leaders only. 52% agree the same, 2% disagree and rest remains in the neutral position.

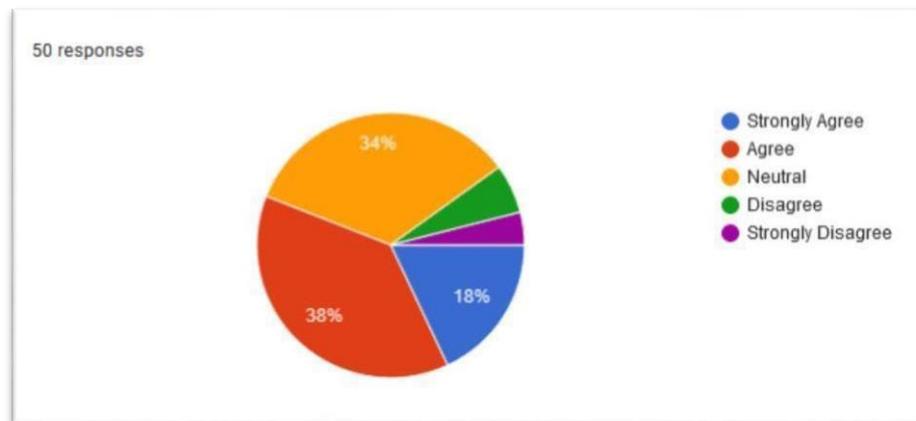
4.9 SUBORDINATION OF INTEREST

Table 4.12 Subordination of Interest

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	9	5	45	18%
Agree	19	4	76	38%
Neutral	17	3	51	34%
Disagree	3	2	6	6%
Strongly Disagree	2	1	2	4%
Total	50	15	180	100

Source: Primary Data

Figure 4.12



INTERPRETATION

From the above data we infer that 18% strongly agrees that they give more priority to the interest of the company rather than personal goals. 38% agrees the same 6% disagrees 4% strongly disagrees and rest stays in neutral position.

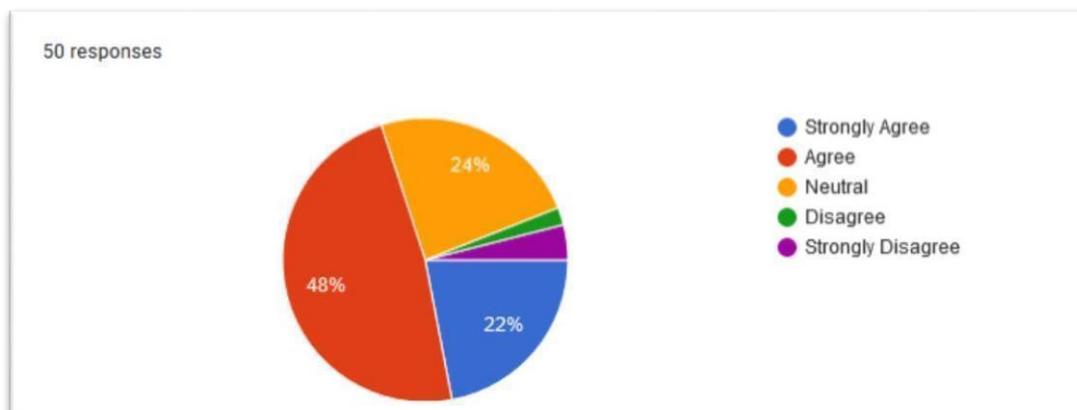
4.10 AUTHORITY AND RESPONSIBIITY

Table 4.13 Authority and Responsibility

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	11	5	55	22%
Agree	24	4	96	48%
Neutral	12	3	36	24%
Disagree	2	2	4	2%
Strongly Disagree	1	1	1	4%
Total	50	15	192	100

Source: Primary Data

Figure 4.13



INTERPRETATION

From above mentioned data, we can infer that 22% strongly agrees that they are well aware of your responsibilities and are satisfied with the authority you have to discharge your responsibilities 48% agrees the same 2% disagrees and 4% strongly disagrees the same, the rest stands in a neutral position.

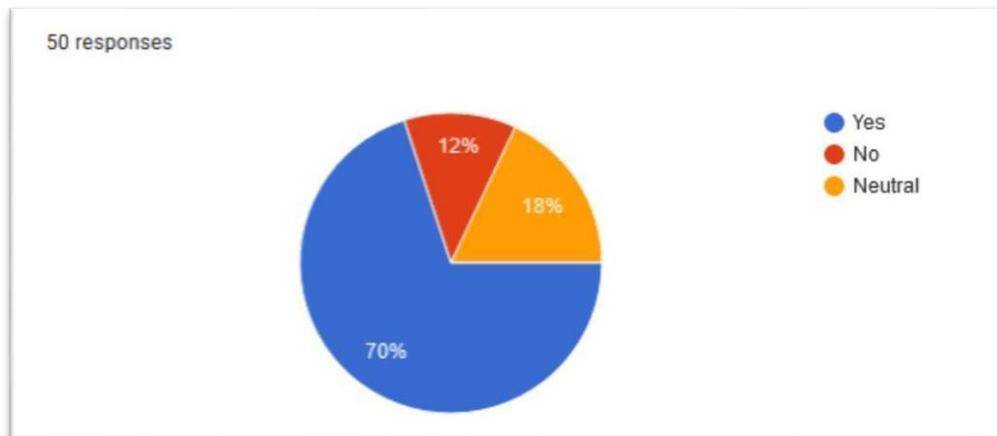
4.11 EMPLOYEES INITIATIVE

Table 4.14 Initiative

Response	No. of Respondents	Percentage
Yes	35	70%
No	6	12%
Neutral	9	18%
Total	50	100

Source: Primary Data

Figure 4.14



INTERPRETATION

From the above data, we can infer that 70% says that the management give due respect to your suggestions, 12% says that management doesn't give due respect to your suggestions and the rest stands in a neutral position.

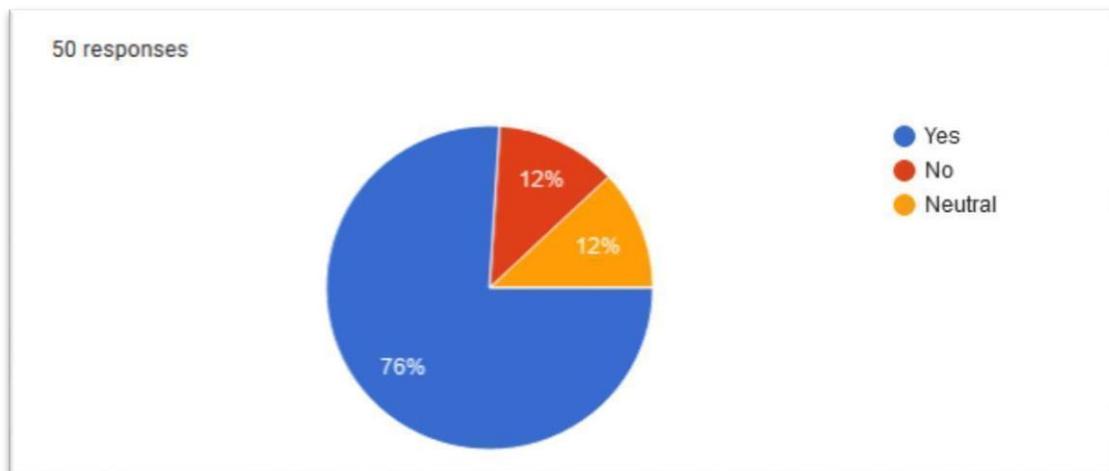
4.12 PERFORMANCE FEEDBACK

Table 4.15 Performance Feedback

Response	No. of Respondents	Percentage
Yes	38	76%
No	6	12%
Neutral	6	12%
Total	50	100

Source: Primary Data

Figure 4.15



INTERPRETATION:

From the above data we can infer that 76% says their manager gives performance feedback, 12% Disagrees that and the rest stands in neutral position.

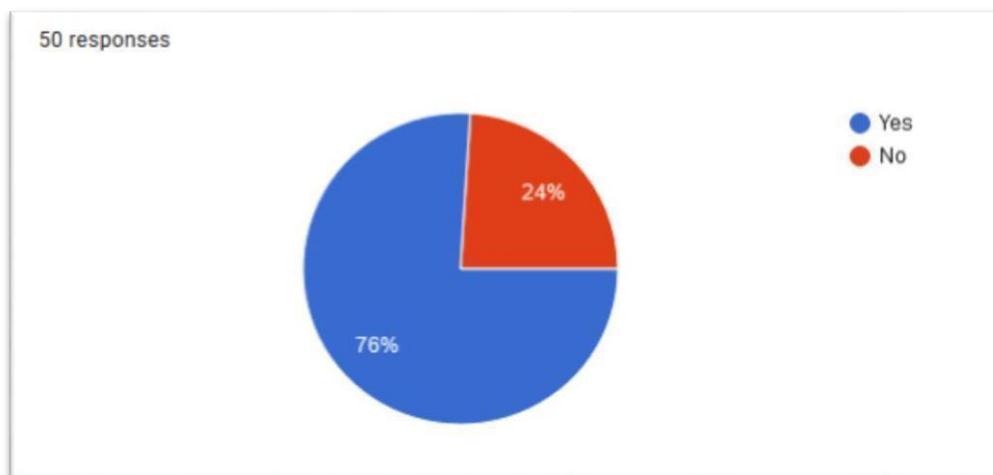
4.13 FEEDBACK SYSTEM

Table 4.16 Feedback System

Response	No. of Respondents	Percentage
Yes	38	76%
No	12	24%
Neutral	0	0%
Total	50	100

Source: Primary Data

Figure 4.16



INTERPRETATION

From the above data we can infer that 76% says they have a proper feedback and 24% says they don't have a proper feedback.

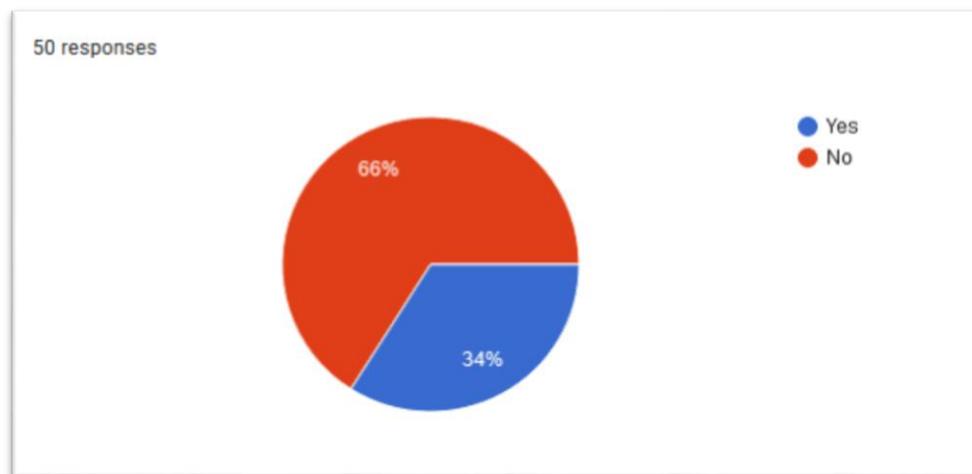
4.14 STABILITY OF PERSONAL TENURE

Table 4.17 Stability of Personnel Tenure

Response	No. of Respondents	Percentage
Yes	33	66%
No	17	34%
Total	50	100

Source: Primary Data

Figure 4.17



INTERPRETATION

From the above data we can infer that 66% says that bonds are signed upon joining and 34% responded no.

4.15 OPINION REGARDING TENURE

Table 4.18 Tenure

Responses	No. of Respondent
1- 2 years	2
Less than one year	12
Yes	1
No	2
Not Applicable	33
Total	50

Source: Primary Data

Note: Some employees have not specified how many years they are receiving bonds.

INTERPRETATION

From the above data we can infer that out of the sample size only few have received bonds for more than 2 years and others less than a year.

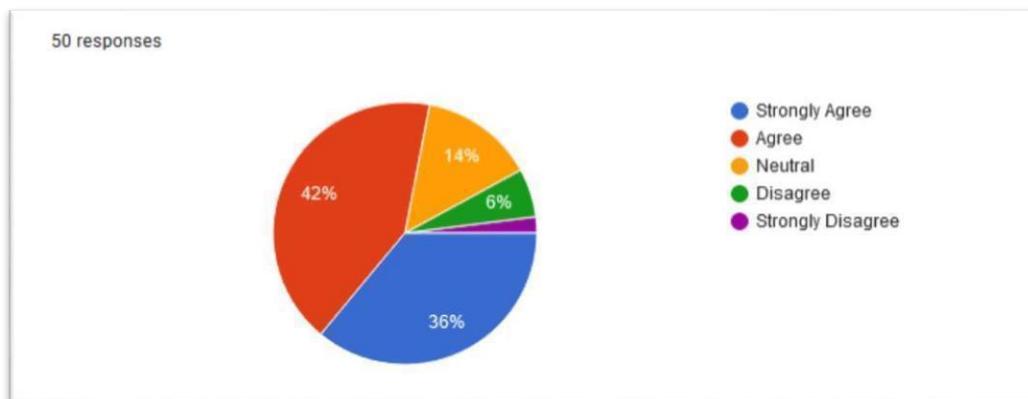
4.16 EQUAL TREATMENT OF EMPLOYEES

Table 4.19 Equality

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	18	5	60	36%
Agree	21	4	84	42%
Neutral	7	3	21	14%
Disagree	3	2	6	6%
Strongly Disagree	1	1	1	2%
Total	50	15	172	100

Source: Primary Data

Figure 4.19



INTERPRETATION

From the above data we can infer that 36% strongly agrees equal opportunities for growth and development are available for all the employees without any bias, 42% agrees the same, 6% disagrees and rest stands in a neutral position.

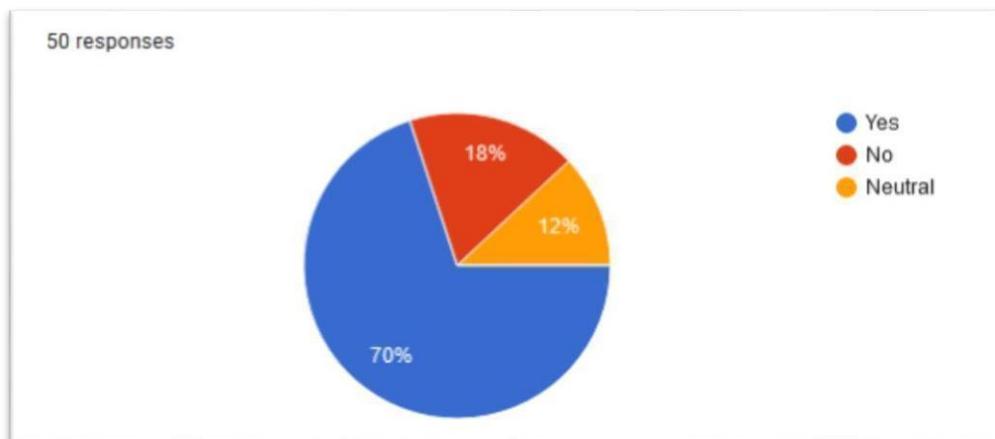
4.17 SPECIALIZATION OF WORK

Table 4.20 Specialization

Response	No. of Respondents	Percentage
Yes	35	70%
No	9	18%
Neutral	6	12%
Total	50	100

Source: Primary Data

Figure 4.20



INTERPRETATION

From the above data, we can infer that 70% says that they get an opportunity for specialization, 18% says no, and the rest stands in a neutral position.

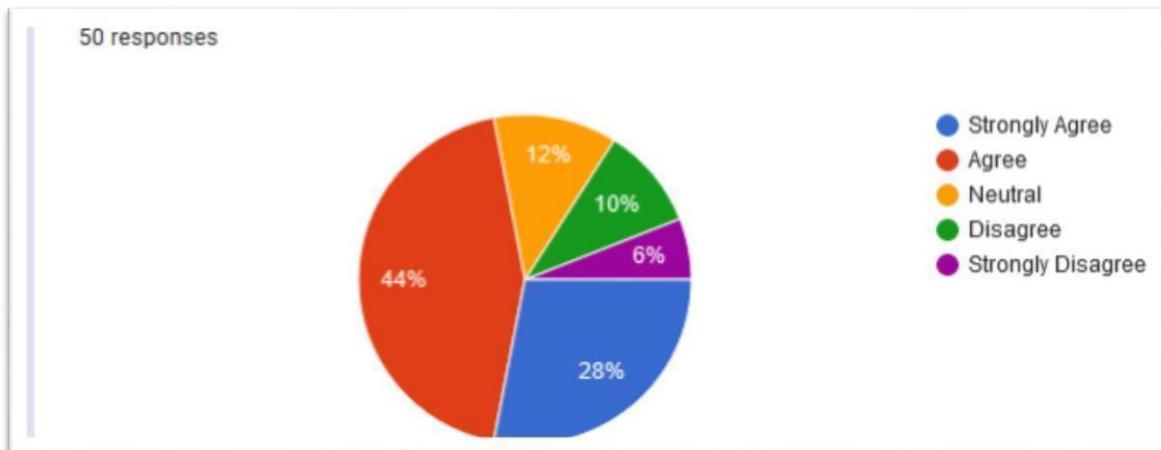
4.18 REMUNERATION OF EMPLOYEES

Table 4.21 Remuneration

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	14	5	70	28%
Agree	22	4	88	44%
Neutral	6	3	18	12%
Disagree	5	2	10	10%
Strongly Disagree	3	1	3	6%
Total	50	15	189	100

Source: Primary Data

Figure 4.21



INTERPRETATION

From the above data we can infer that 28% strongly agrees that, the company provide equal remuneration for the employees with similar job, 44% agrees the same, 10% disagrees, 6% stronglydisagrees and rest stands in a neutralposition.

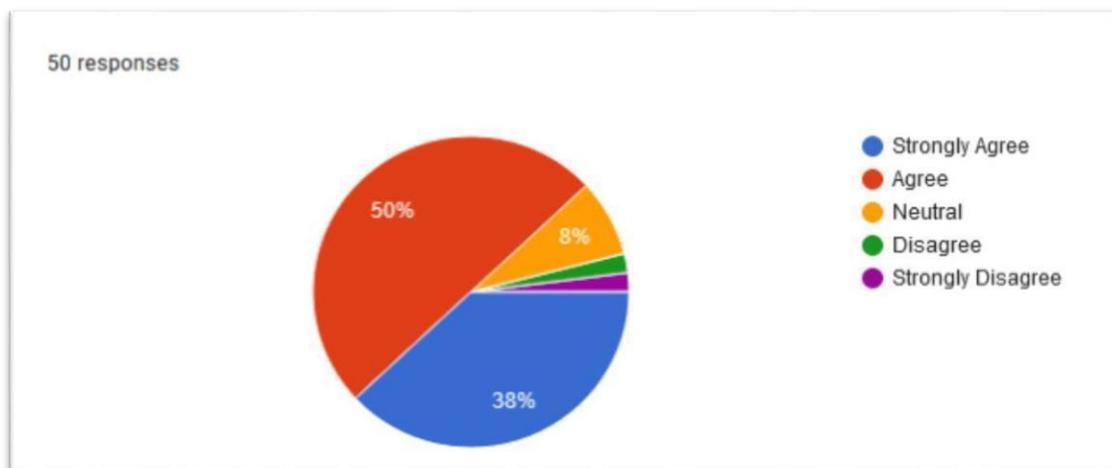
4.19 DELEGATION OF WORK

Table 4.22 Delegation

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	19	5	95	50%
Agree	25	4	100	38%
Neutral	4	3	12	8%
Disagree	1	2	2	2%
Strongly Disagree	1	1	1	2%
Total	50	15	210	100

Source: Primary Data

Figure 4.22



INTERPRETATION

From the above data we can infer that 19% strongly agrees that superior consider them as a member of the team, 50% agrees the same, 8% disagrees, 2% strongly disagrees and rest stands in a neutral position.

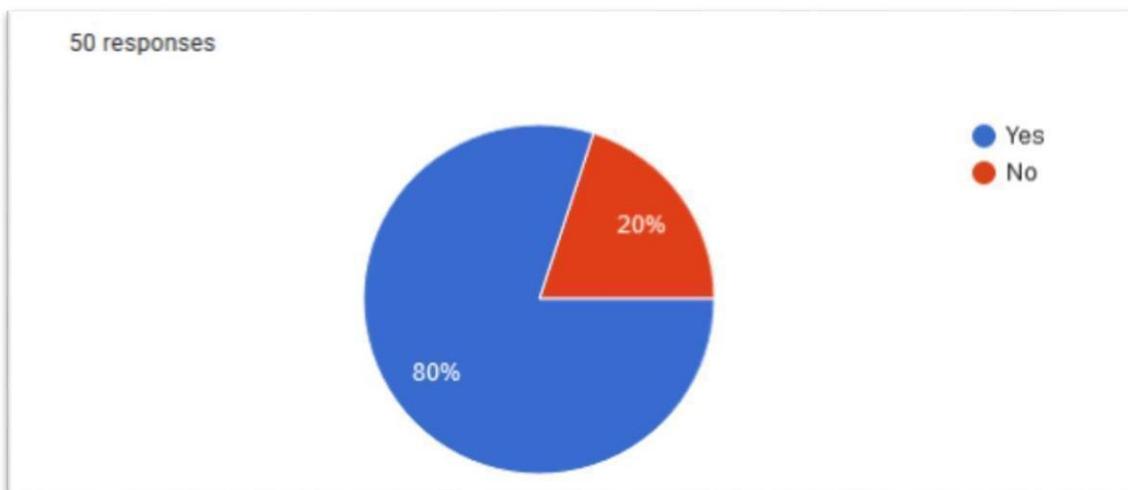
4.20 DECISION MAKING

Table 4.23 Decision making

Response	No. of Respondents	Percentage
Yes	40	80%
No	10	20%
Total	50	100

Source: Primary Data

Figure 4.23



INTERPRETATION

From the above data we can infer that 80% says that they get opportunities for decision making and 20% disagree to that

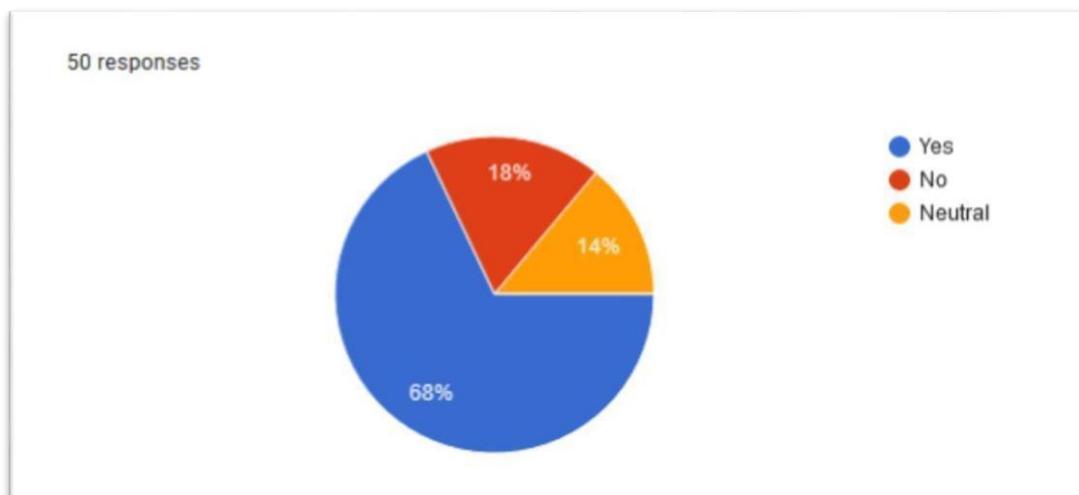
4.21 WORK ENVIRONMENT

Table 4.24 Work Environment

Response	No. of Respondents	Percentage
Yes	34	68%
No	9	18%
Neutral	7	14%
Total	50	100

Source: Primary Data

Figure 4.24



INTERPRETATION

From the above data, we can infer that 68% says that the work environment motivate you to work hard 18% says no, and the rest stands in a neutral position

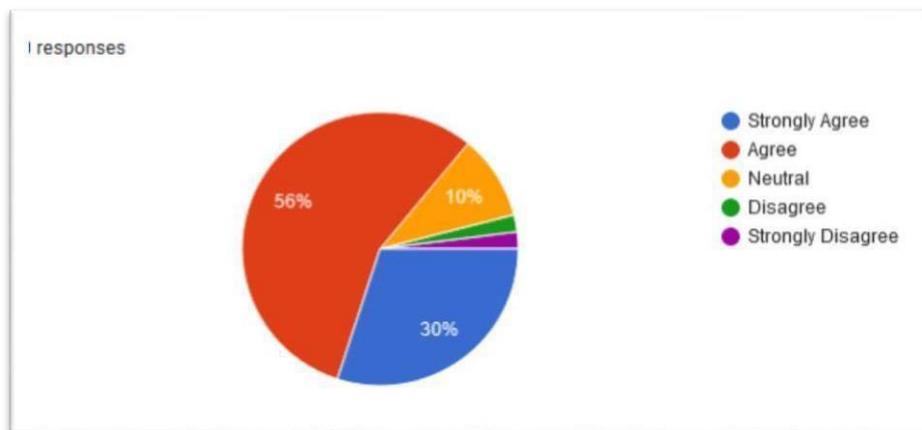
4.22 COORDINATION AMONG EMPLOYEES

Table 4.25 Coordination

Responses	No. of Respondents	Weights	Weighted Frequency	Percentage
Strongly Agree	15	5	75	30%
Agree	28	4	102	56%
Neutral	5	3	15	10%
Disagree	1	2	2	2%
Strongly Disagree	1	1	1	2%
Total	50	15	195	100

Source: Primary Data

Figure 4.25



INTERPRETATION

From the above data we can infer that 30% strongly agrees that there is coordination among employees 56% agrees the same, 2% disagrees, 2% strongly disagrees and rest stands in a neutral position.

FINDINGS

The analysis has been conducted to find out the implementation of managing principles in EVM cars, Ernakulam. The study reveals following findings:

- The majority of the employees in the organization are male.
- Majority of the employees are familiar with Fayol's 14 principle of management.
- Half of the employees find that they are provided with proper equipment required for their work. This indicates that there is proper order in the company i.e. the employees are able to find the right things in the right time.
- Most of the employees are satisfied with rules and regulations of the company so we can infer that there is discipline among the employees. It was also observed that the employees have dress code, a proper suggestion system etc .. Hence, it is understood that principle of discipline is followed by the organization effectively.
- Majority of the employees have agreed that they have all the authority connected with their work. This indicates that the principle of authority and responsibility have been followed by the organization in an effective manner.
- Majority of the employees have agreed that their suggestions are given importance by their Boss. This indicates that the principle of initiative have being implemented in the organization effectively.
- Majority of the employees have the opinion that there is equality in the payment of remuneration to employees doing similar jobs. This indicates that the principle of remuneration is followed by the organization effectively.

- Majority of the employees have agreed that the organization follows the principle of unity of command effectively.
- Some of the employees have agreed that there is proper flow of work. It indicates that the organization follows the principle of scalar chain but it is not effective.
- Majority of the employees are with the opinion that there is a chance for specialization as same work is repeated over the time.
- Majority of the employees have the opinion that there is equality in treatment to employees. This indicates that the principle of equality is followed by the organization effectively.
- Majority of the employees are with the opinion that the work environment motivates them to work hard.
- Majority of the employees have the opinion that there is proper coordination among the employees. This indicates that the principle of Esprit De Corps is followed by the organization effectively.
- Majority of the employees have signed bonds upon joining but upon asking for the duration of the bond only 19 of the employees answered. Hence the principle of stability is followed by organization effectively
- Employees as a part of boosting their performance are provided with motivational factors. The organization gives both monetary and non-monetary motivational factors based on their performance.
- Majority of the employees have a clear knowledge about the prime objective of their company. Hence the principle of unity of direction is followed by the company

- Most of the employees agreed that they give prior importance to the interest of the company. This shows that majority give priority to the interest of the company rather than their personal goals.
- The organization is mainly divided into six departments Sales, Service, HR, accounts, IT, Registration, Tele, Insurance. Each department is headed by a manager and they always give feedback and suggestion to the employees.
- Majority of the employees gets opportunity to express their opinions and decisions this indicates that there is delegation of authority among the subordinates. From this we can understand that the principle of Centralization and Decentralization.

SUGGESTIONS

1. Even though it is inferred that the most of the employees have equal opportunities for growth and development. The company should focus more on providing equal opportunities so that the full potential of the employees are utilized.
2. The company has to provide remuneration to each and every employee for their work in order to raise their standard of living and motivate them, though most of the employees agree that they are provided proper remuneration, the company has to make sure all the employees are satisfied, as it is an obligation of the company.
3. Coordination among employee is an important factor for the working of a company. Since the employees feels that there is no proper coordination among them the manager can organize group activities, meetings etc.. to encourage coordination.

CONCLUSION

This study is conducted in order to know about the implementation of management principles in EVM Nissan, Ernakulam. It was conducted with the sample size of 50 employees of the organization using questionnaire. From the analysis, it was found that the principle of management is very important in the smooth running of the company. As observed in the data, the organization is following Fayol's principle in their day to day workings. The findings shows that the company has applied principles of management through proper division of work, giving importance to the employees, prioritizing the companies interest, providing proper work environment and equipment, a proper platform to the employees to express their suggestions and opinions etc.... in order to increase the efficiency of the organization .Even though Fayol's principle is a decade old it has some relevance in present day. For example, the principle of Stability is important in today's world. The principle of stability tells us that the person should be in the post for a specific period.

Today when an employee is chosen they are given an adequate training of what to do and bonds are signed upon joining like we have seen in the study. Similarly the principle of division of work the activities are divided and the employees performs it repeatedly which leads to specialization of the task. The employee in the study also agrees that they are provided with the chance of specialization. To sum up we can understand how the principles of management are still relevant.

Management principles are regarded as the backbone of every organization as it helps in managing the concern in an efficient manner. Hence, it is very important for all the organizations to implement Fayol's management principles for the smooth running of the organization

Examining the Novel
***The Other Hand* within the Ambit of *Homo Sacer* and Trauma**



*Project submitted to St. Teresa's College (Autonomous) in partial fulfillment
of the requirement for the degree of BACHELOR OF ARTS in English
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I hereby declare that this project entitled “Examining the Novel *The Other Hand* within the Ambit of *Homo Sacer* and Trauma” is the record of bona fide work done by me under the guidance and supervision of Ms. Lakshmi Priya B, Assistant Professor, Department of English.

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An Abstract of the project entitled
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In the current global societal level, the refugee becomes the emblematic contradiction of the state's central system in response to the demands for justice. There is a need to rethink the concept of refugees in a holistic manner and to reconcile with the idea of universal equality. The refugee narrative *The Other Hand* also known as *Little Bee* in the U.S, is a 2008 novel by the British author Chris Cleave. The main focal point surrounds the undermined situation of the current scenario; the Niger Delta Conflict and dives into the hidden life of refugees. The objective of this project is to study the above mentioned novel on the basis of theories that explore how international obligations and human rights of the refugees are treated secondary to the sovereign state. This dissertation also aims to understand the appalling situation of refugees where they are abandoned with the denial of universal human rights and the measures adopted by the nation states. Chapter one outlines Giorgio Agamben's theoretical concept of *Homo Sacer* and explores how the refugees are placed in the figure of *Homo sacer*. The abandonment of refugees leads to traumatization and is explained in relation to modern literary trauma theory by the theorist Cathy Caruth. Chapter two sketches the detailed analysis of the novel and within the theoretical framework of *Homo sacer* and also looks into the trauma that the refugee narrative highlights.

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Introduction

In an epoch marked by perpetual war and rising inequality across the globe, and the intensification of the long refugee crisis, the ideas and affects found in writing about refugees have become a new language altogether, a language that would open up new ways of being in the world. Predominantly, this vision cuts against an inherited idea of refugees as passive supplicants seeking mere recognition as human beings. The global powers, world leaders, politicians and media have convinced the public that we are currently facing a global migrant crisis. This phrase has become a household utterance even though most people can't tell why or what it means.

In the early twentieth century, writing by and about refugees was largely considered as a European phenomenon. A generation of writers like W.H. Auden, Samuel Beckett and George Orwell were also writers responding to the conditions of modern refugees. However after World War II, the visibility of refugee writing was impaired by the expansion of national sovereignty across the globe. But new refugee literature did develop in areas of Palestine and the Indian continent. During the 1960s, the kind of third world 'humanitarian narrative' dominated the language of refugee literature in the west.

Many countries and other countless global powers are in the state of reducing the national quotas for the resettlement of refugees and asylum-seekers, as a result the cultural appetite for the refugee literature is increasing. Copious amount of novels and short stories written by the members of refugee communities have helped overcome this tragedy and lived to pen their tales and continue to appear on bookstands, best-seller lists, and in independent bookstores. In the face of sensationalized media discourse on the global migrant crisis, it is the role of literature and culture: autobiographical or

fictionalised, remind us that our conversations about a “crisis” are about the lived realities of people, who love and live just like we do, but who are unlucky enough to find themselves in a conflict zone.

The term “asylum seeker”, describes a person who has applied for refugee status and is waiting for the decision on their claim. But often, it is used to describe those trying to reach a particular country to make the asylum claim. Therefore, an asylum seeker can be called a refugee. Dating back to the 15th century, the word asylum refers to “a sanctuary or inviolable place of refuge and protection for criminals and debtors, from which they cannot be forcibly removed without sacrilege”, as per *The Oxford English Dictionary*. It can be argued that, to escape the sense of obligation inherent in the definition of the refugee and the origin of the word asylum, the term “illegal migrant” has been employed also for this purpose. Even though the term migrant in itself carries the negative connotation and defining the migrant as “illegal” provides an anti-refugee rhetoric. In early September 2015, the most distressing pictures of the three-year-old Syrian refugee Alan Kurdi’s body lying washed up on a Turkish beach, had widely spread through both traditional media and social media. Around two thousand refugees were missing after trying to cross the Mediterranean Sea (as per UNHCR, 2016d), and the whole international society got shook by the fate of Alan Kurdi and the predicament faced by so many other refugee children. Hence the term refugee must be value- free, which implies to let them in the territory and chance to seek asylum.

The dissertation analyses the fiction *The Other Hand*, also known as *Little Bee* in the U.S, is a 2008 refugee novel by the British author Chris Cleave. The author Chris Cleave is a British writer and journalist, and Cleave's debut novel *Incendiary* was published in twenty countries and has

been adapted into a feature film. His second novel, *The Other Hand*, was released in August 2008 and was described as "A powerful piece of art... shocking, exciting and deeply affecting... superb" by *The Independent*. It has been shortlisted for the 2008 Costa Book Awards in the Novel category. Cleave was inspired to write *The Other Hand* from his childhood in West Africa. It was released in the US and Canada in January 2009 under the title *Little Bee*. The issue of the refugee reveals the unavoidable gap between the inclusive logic of universal human rights which are essentially denied and the state nation's prerogative to exclude the undesirable - asylum seekers/ refugees.

It is a narrative story about a sixteen-year-old Nigerian asylum seeker who escapes from the oil conflict in the Niger Delta and has undergone the fears and wretched conditions in an immigration detention centre in Essex, England. The main focal point surrounds the undermined situation of the current scenario; the Niger Delta Conflict. It narrates the story of Little Bee, a Nigerian refugee, and Sarah O'Rourke (née Summers), who is a magazine editor from Surrey. After spending two years detainment in a British immigration detention centre, the protagonist gets released illegally after a fellow refugee performs sexual favours with a detention officer. Later Little Bee plans to take refuge in the home of Sarah and her husband Andrew, whom she met two years previously on a beach in the Niger Delta. Little Bee makes an impromptu call to Andrew concerning her arrival. Sarah is initially unaware of Little Bee's arrival, until Andrew, gets haunted by the guilt of their shared past, and commits suicide. Little Bee reveals herself to Sarah on the day of Andrew's funeral, and helps her to care for her four-year-old son Charlie. Through a mutual reflection on their past, it is revealed that Sarah and Andrew were on holiday at the time of their meeting with Little Bee. One morning on the beach,

fourteen-year-old Little Bee, and her older sister Nkiruka approached them as they were being pursued by soldiers who had burned down their village and intended for there to be no witnesses left alive. The soldiers arrived and murdered a guard from the O'Rourkes' hotel, but offered to spare the lives of the girls if Andrew would amputate his own middle finger with a machete. Being frantic, Andrew refused, but Sarah complied in his place. Despite of Sarah sacrificing herself, the soldiers took both girls away, leaving the couple in doubt as to whether the soldiers would leave one girl alive, as they promised.

Although Little Bee was allowed to escape, her sister gets gang raped, murdered, and cannibalized by the soldiers, and Bee gets stowed away in a cargo ship for England. Sarah decides to shelter Little Bee, and resolves on helping her become a legal British citizen. Lawrence [Sarah's boyfriend], disapproves of her actions and contemplates turning Little Bee in to the police. When he informs Little Bee that he is considering this, she responds that allowing her to stay would be what is best for Sarah, so if Lawrence turns her in, Little Bee will get revenge by telling his wife Linda about his affair. The two reach an uneasy truce. A few days later, Sarah, Lawrence, Little Bee and Charlie take a trip to the park. Charlie goes missing, and Little Bee calls the police while Sarah searches for him. Although Charlie is found back, the police identifies Little Bee as an illegal immigrant. Hence gets detained once again and is deported back to Nigeria, where she believes to be killed. Lawrence uses his privilege with Home Office connections to track Little Bee's deportation details, and hence gets accompanied back to Sarah's home.

Sarah believes that Little Bee will be safe as long as she is present, and together they begin collecting stories for a book Andrew had begun about the atrocities committed during the Nigerian oil

conflict, and which Sarah intends to finish on his behalf. During a trip to the same beach where they first encountered one another, soldiers arrive to take Little Bee away. Despite being captured, Little Bee is not dispirited, and instead is ultimately hopeful at the sight of Charlie playing happily with a group of Nigerian children, which highlights a ray of hope for the plight of refugees.

The objective of this project is to study the above mentioned novel on the basis of theories that explore how international obligations and human rights of the refugees are treated secondary to the sovereign state. This is investigated in the light of Giorgio Agamben's theoretical concept of *Homo Sacer* as an individual of the ancient Roman law who can be killed but not sacrificed- it explores how the refugees are placed in the figure of *Homo Sacer*. This dissertation also aims to understand the appalling situation of refugees where they are abandoned with the denial of universal human rights which is not accidental but, rather inherent to the measures adopted by the nation states. This kind of abandonment leads to traumatization and is explained in relation to the conventions of modern literary trauma theory. It is studied within the theoretical statements put forth by the leading trauma theorist Cathy Caruth .

Chapter One outlines how the refugees are placed in the figure of *Homo Sacer*, and further it examines the room in which sovereign states interact with international agreements and human rights. The theory of sovereign power offered by Giorgio Agamben's *Homo Sacer: Sovereign Power and Bare Life* is based on the state of exception [reference to Schmitt] and the production of bare human life caught in the sovereign ban, which constitutes the threshold of

political community. It explores the sovereign attitudes towards the refugees which perpetuate the status of *homines sacri*. Agamben further claims biopolitical enterprise through which the sovereign power is able to enforce its role by draconian means while remaining nominally within the law (Agamben). Another hypothesis that integrates in the text is the concept of traumatization. This is explained in relation to the conventions of modern literary trauma theory. It is crucial to understand the plight of their mental stability in the light of modern literary trauma theory. This is studied within the theoretical statements put forth by the leading trauma theorist Cathy Caruth. The responses to traumatic experience can be seen through the life of all the characters in the novel. The characteristic of traumatic experience and memory leads to cognitive chaos and the possible division of consciousness (Caruth).

Chapter Two briefly sketches the complete analyses of the novel and scrutinizes text within the theoretical framework. The overarching theme for this paper is the relationship between the sovereign state and human rights observed through Giorgio Agamben's concept of *Homo Sacer*. This mentions the plight of mental stability through the modern literary trauma theory. It brings in instances from the novel to provide relevance in the discussion of these theories.

Chapter One

Homo Sacer and Trauma: A Theoretical Framework

The word refugee as per the UNHR defines as someone who has been forced to flee his or her country because of persecution, war, or violence. They have a well – founded fear of persecution for reasons of race, religion, nationality, political opinions, etc. Most likely, they cannot return home or are afraid to do so (“What Is a Refugee? Definition and Meaning | USA for UNHCR”). An asylum seeker is someone who claims to be a refugee but whose claim hasn’t been evaluated. Normally, these people would have claimed for asylum on the grounds that returning to his or her country would lead to persecution on account of war, conflicts, religion, political issues, race, etc. Sometimes, this person is an asylum seeker for so long as their application is pending. But international obligations and human rights are indeed treated secondary to the sovereign state. Hence this is legitimised by creating a paradigm of security of the nation state and its citizen’s protection. The refugees become a threat as they challenge the nomos of state, territory, and birth. The refugees / asylum seeker is positioned within the figure of Homo sacer, which furthermore opens up for the inclusive exclusion of refugees.

According to Giorgio Agamben, refugees can be seen as the ultimate ‘biopolitical’ subjects who can be regulated and governed at the level of population in a permanent state of exception. In fact refugees can be reduced to ‘bare life’: human beings as animals in nature without political freedom (Agamben).

Agamben’s claims on refugees as much wider political theory that fulcrums on the interpretation of the causes and consequences of Aristotle’s distinction between two forms of life. This consists of *zoe*- life

that becomes rooted in nature and has homogeneity with all living creatures, and ‘bios’ – for good life which Greeks have understood as a political way of life. According to Aristotle what distinguishes humans from other animals is the ability to speak and engage in political habitude. What political binaries in the western thought believes between subject and citizen, public and private is the fact that political existence is different from simple fact of living (Agamben, *Homo Sacer*).

For Agamben, the tradition of western political thought and practice is founded on a consecutive exclusion and therefore inclusion of *zoe* [biological life] from politics. Thomas Hobbes modern political theory argues that in the state of nature fear of violent death was so great that the sovereign could claim obedience from its citizens in exchange for protection against violent death. This necessarily means that the state retained the monopoly on legitimate killing, including its own citizens. But giving up this unhampered liberty, the subjects could expect some rewards. As per Hannah Arendt in the nation state we see body of peoples and political communities in the image of a family whose everyday affairs have to be taken care of by a gigantic, nation- wide administration of housekeeping (Arendt 110).

To rephrase it, the ancients excluded *zoe* from what the political and modern nation states have made life central to politics. The distinction between *zoe* and *bios* was blurred with the emergence of nation state. People who get captured in the sovereign ban are stripped of all legal status, and henceforth banned from the political community. In this way, the sovereign decides which lives will be recognised as belonging to the community of political beings and which will be classified only in terms

of biological fact. The basis of this distinction is addressed by Agamben with reference to the two terms used by the Greeks to distinguish between forms of life: *zoe*, 'natural reproductive life' confined to the private sphere, and *bios*, 'a qualified form of life', political life (Agamben 10).

Those who are banned from the domain of political beings are reduced by the sovereign to life defined only in terms of *zoe*, which is recognised by the sovereign only as biological beings. In Giorgio Agamben's '*Homo Sacer : Sovereign Power and Bare Life*', the project of *Homo Sacer* brings in a reconsideration of theories of sovereignty.

The theory of sovereign power is based on the state of exception and the production of bare human life caught in sovereign ban. It also responds to Foucault's theory of biopolitics, in which the human life becomes the target of state's organisational power.

Agamben argues that the sovereign power establishes the production of a political order based on the exclusion of bare human life. The law is suspended in this enactment of exception. The human is stripped from the legal status and transformed in relation to sovereign power into a bare life without rights. Agamben argues that this state of exception gives rise to the judicial order. The rule suspending itself, gives rise to the exception- the judicial order suspends its own validity and produces the exception of bare life. In relation to the exception, it first constitutes itself as a rule(Agamben 3, 21).

The function of international organisations is to manage the refugee populations in a manner that does not radically erode the framework of the nation state. The refugee must either return to their home

or must be naturalised somewhere else. But these people are governed as subjects amenable to public and private management techniques. They are linked to the rationalities of economic globalisation.

Agamben takes his theory in a different manner from found in Foucault, with which that what is more important about sovereignty is not the modern 'sovereign/ subject relationship'. Rather Agamben borrows his non- Weberian definition of sovereignty from German Jurist Carl Schmitt. Instead of the territorially defined entity claiming monopoly on the legitimate use of violence, but the sovereign decides the exception. The sovereign can decide when the law can be suspended because the sovereign becomes the lawgiver that decides the space in which the rule has validity. That is the declarations of emergency, suspension of law, establishment of asylum detention camps where 'opt outs' from various human rights legislation are considered normal and are not rare phenomena. This reveals the fundamental structure of law and the real image of judicial and political order.

Agamben calls for his 'zone of indistinction' between norm and exception. He claims that the zoe- humans as animals without speech and political freedom can be included in politics, where the state of exception is declared and materialised in the form of camps. The term 'camp' is used to describe those places in which biological and political life, private and public, cannot be distinguished from each other. This exceptional spatial arrangement, for example a detention centre for asylum seekers, a 'black' rendition site, or a Nazi death camp continues to function outside the normal judicial order. In the Nazi camps authorizes the state to take any person into custody even if they had not broken any law, and hence this necessarily becomes a state of siege (Agamben 12).

He argues that, when a human (a refugee) is excluded from the protection of the law, and hence it is tantamount to include naked life. Sovereignty and law are productive. The exclusion of refugees are included in the legal order. As per Agamben's notion, it is the sovereign power that decide whether the 'human victim can be killed and not sacrificed'. The victim is named as *homo sacer* (sacred man) who in Roman law is a person who might be killed with impunity but not 'sacrificed' in a religious ritual. Agamben argues that a growing number of people are vulnerable to this specific form of violence. The law legitimizes torture, killing without punishment and leads to death that is not honoured, mourned or memorialised. In refugee camp, the individuals are subjected to various forms of violence without legal consequence of the judicial order (Agamben, 1998, p.52). Refugees are produced as (or reduced to) 'bare life' literally and metaphorically in the camps.

The sovereign ban has captured a certain paradigm of bare life. Agamben finds it through the lens of *Homo sacer* in the archaic Roman law. This figure is stripped of all legal status and is expelled from the political community. *Homo sacer* is exposed unconditionally with the potential to be killed by anyone. So a *homo sacer* could simply mean a person extirpated from the society. *Homo Sacer* becomes someone who can be killed but the killer is not regarded as a murderer, and also a person who cannot be sacrificed. The sacred man could only rely on protection of gods. As Agamben mentions, the historical concentration camp, such as those of the Spanish in Cuba or the British in South Africa, were born 'out of a state of exception and martial law'. With reference of the Nazi State, that the concentration camp system of 20th century totalitarianism is now the product of a 'willed' state of exception. This becomes a niche for the state of exception to become a rule. The camp, brought through the enactment of the

state of exception, is distinctly the product of sovereign power. It is the space in which bare life is seized by the State. The inhabitants were stripped of every political status and wholly reduced to bare life. Therefore the camp becomes the absolute biopolitical space without any life. This is the condition through which the bare life of *homo sacer* is banished.

It is an appalling situation for the refugees when they are abandoned with the denial of universal human rights which is accidental, but rather inherent to the measures adopted by the nation states. This abandonment leads to traumatization and is explained in relation to the conventions of modern literary trauma theory. It is crucial to understand the plight of their mental stability in the light of modern literary trauma theory. This is studied within the theoretical statements put forth by the leading trauma theorist Cathy Caruth. The modern literary trauma theory by definition considers the responses to traumatic experience, including cognitive chaos and the possible division of consciousness, as an inherent characteristic of traumatic experience and memory (Caruth). This was articulated by Kali Tal and critics such as Cathy Caruth.

Trauma theory is a theoretical discipline that originates from the Freudian psychoanalysis early in the 20th century. In Freud's work 'Beyond the Pleasure Principles', he elucidates various concepts of trauma theory. From Freud's point of view, the mind is protected by a membrane keeping control of the stimulus, but if a stimulus passes through the membrane, it directly affects the mind. This is Freud's way of relating the word trauma to its origin as a word for bodily wounds, where Freud introduces it as a wound on the mind's protective shield (Rogers 579) .

Caruth's theory is recognised as the origin for most of modern literary trauma theory. She was inspired by Freud's writings, and point towards the same metaphor of trauma as a bodily wound. She expands on the theory of trauma, saying: If the dreams and flashbacks of the traumatized thus engage Freud's interest, it is because they bear witness to a survival that exceeds the very claims and consciousness of the one who endures it (Caruth 60).

Her work *Unclaimed Experience*, attempts to develop a starting theory for working with trauma theory outside the clinical field. She situates a few key concepts as central to a cultural and literary trauma theory. Her concepts are borrowed and sometimes slightly altered from psychoanalysis, but generally these concepts are transferred quite seamlessly. One such central concept is latency. As Caruth states, The historical power of the trauma is not just that the experience is repeated after its forgetting, but that it is only in and through its inherent forgetting that it is first experienced at all (Caruth 17). Latency signifies a delay in comprehension and in the absorption of events into the brain's memory. Latency of experience thus becomes the ultimate cause of repetition: the second major concept tied to Caruth's idea of trauma. Early notions of repetition were mentioned in 'Beyond the Pleasure Principle', where Freud makes a link between traumatic experiences and a repetition of events, either in reality or unconsciously. The trauma induces a condition in which the individual has not fully experienced the trauma and will continue to search for a true experience through repetition (Caruth 92). Shoshana Felman and Dori Laub elaborated on Caruth's theory, specifically by offering a way to have a true experience through their concept of witnessing. Also the process of recovering the traumatic experience

becomes a testimony in which the witness retells their story, but simultaneously experiences it for the first time.

Chapter Two

Analysis of the Novel : *The Other Hand*

In the current global societal level, the refugee crisis becomes the emblematic contradiction of the state's central system in response to the demands for justice. Whether it be the recent Afghanistan-Taliban tensions, wherein a huge number of asylum seekers/ refugees immigrated to different countries, there is a need to provide basic protection for these vulnerable people who escaped from their nation state. The issue of the refugees reveals the unavoidable gap between the inclusive logic of universal human rights which are essentially denied and the state nation's prerogative to exclude the undesirable-asylum seekers/ refugees. In fact some nations have created limitations within the system that exterminate the protection and basic needs for poor and vulnerable refugees. *The Other Hand* also known as *Little Bee* in the U.S, is a 2008 refugee novel by the British author Chris Cleave, ponders over the need to rethink the concept of refugees in a holistic manner to reconcile with the idea of universal equality.

The Other Hand or *Little Bee* is a refugee narrative story about a sixteen-year-old Nigerian asylum seeker/ refugee who escapes from the oil conflict in the Niger Delta and has undergone the fears and wretched conditions in an immigration detention centre in Essex, England. The main focal point of the narrative surrounds the undermined situation of the current scenario; the Niger Delta Conflict. The Niger Delta Conflict began in the 1990s has been an ongoing conflict between the militia groups of Nigeria, Nigerian government, and the foreign oil corporations of the Niger Delta. The Niger Delta is a

major producer of petroleum for nations such as the United States because the region is rich in oil, has led to its exploitation and hence most people in Nigeria live in poverty. They are being exploited as the government and oil corporations are known to be the main source of corruption. The local militia groups had become increasingly violent towards the corporations by stealing the oil and even kidnapping corporation workers for ransom.

However, the discovery of oil, which was expected to improve a lot of the communities, has now become a curse rather than a blessing because of oil exploration activities and its hazards, such as air and water pollution. As a result the indigenous people have demanded recompensation as well as control of the oil reserves. This demand has set hostilities between activists and Multinational Oil Companies operating in the region as well as the Federal Government. The protest which started off peacefully metamorphosed into an armed conflict after the killing some of the leaders of the movement [renowned activist and playwright]. This led to the abduction of foreign oil workers, bombing of oil installations and destruction of lives and property. (“Towards Ending Conflict and Insecurity in the Niger Delta Region - Nigeria | ReliefWeb”)

The current conflict in the Niger Delta first arose in the early 1990s over tensions between foreign oil corporations and a number of the Niger Delta's minority ethnic groups who feel they are being exploited. This struggle caused the militarization by ethnic militia groups, Nigerian military and the police forces. This has also contributed to Nigeria's ongoing energy supply crisis. The Delta produces most of Nigeria's oil, and is the source of most of the Nigerian government's revenue which is

essential for the stability of Nigeria's current political system("Towards Ending Conflict and Insecurity in the Niger Delta Region - Nigeria | ReliefWeb").

The text is analysed in the light of Giorgio Agamben's theory of *Homo sacer* and "Bare life". Giorgio Agamben establishes the idea of refugees seen as the ultimate 'biopolitical' subjects who can be regulated and governed at the level of population in a permanent state of exception. In fact refugees can be reduced to 'bare life': human beings as animals in nature without political freedom. The author brings in the first person perspectives, wherein the protagonist 'Little Bee' who escaped from the oil conflict of the Niger Delta and got stowed away in the cargo hold of a ship bound for England. She spends two years in the "Black Hill Immigration Removal Centre", Essex. As per Cleave: "it does not exist in the real world, although some of its particulars would seem familiar to the thousands of asylum seekers detained in the ten real immigration removal centres"(375). Little Bee and other fellow refugees in the detention centre is pushed into the state of biopolitics and is caged like wolves under the fluorescent lights, denied all the basic amenities viable to a refugee. Author portrays the helplessness of the protagonist to dance and sway the detention officers in order to get extra food. They are a new breed of human being and does not belong to the nation state and hence corned them in a permanent state of exception- Bare life. The two years of dreadful detention ends after a fellow refugee performs sexual favours for a detention officer. They are reduced to Bare life where the authorities forget the human obligations and concurrents them as animals devoid of any political freedom and rights. The system is very cruel and it was better to kill oneself. There is a

constant fear and eyes flickering to see moment of men coming- treat of sexual abuse. There are things the men can do to you in this life, I promise you, it would be much better to kill yourself first (Cleave 67). As a result she is predetermined to kill herself in the harrowing environment. In lieu of the authorities claiming legal requests of the asylum seekers, their applications are kept pending and hence recommences with the detention activities diminishing the basic rights of an asylum seekers.

For Agamben, the tradition of western political thought and practice is founded on a consecutive exclusion and therefore inclusion of 'zoe' [biological life] from politics. The distinction between 'zoe' and 'bios' was blurred with the emergence of nation state. People who get captured in the sovereign ban are stripped of all legal status, and henceforth banned from the political community. In this way, the sovereign decides which lives will be recognised as belonging to the community of political beings and which will be classified only in terms of biological fact. The basis of this distinction is addressed by Agamben with reference to the two terms used by the Greeks to distinguish between forms of life: 'zoe', 'natural reproductive life' confined to the private sphere, and *bios*, 'a qualified form of life', political life. The sovereign represented by the state authority speaks the name of the refugee in question; the given name determines the likely future path of the refugee, which may grant her refuge and the subject may live, or it may destine the subject to return to their home country and potentially face death. The protagonist becomes a refugee but essentially there is no refuge. According to the protagonist, the refugees were denied of caseworkers to sanction their legal application. Hence they got

captured in the sovereign ban and are stripped of all legal status, and henceforth the authorities are trying to ban them by keeping the name of an illegal immigrant from the political community. The disobliging attitude of the natives towards the sovereign state astonishes the readers of the novel. The natives are vigilant of the uncompromising treatment towards the refugees. They know the real truth behind the sovereign state, but unable to fight back against them- doesn't care about you refugees, doesn't care about the countryside, doesn't care about the farmers (Cleave 88). When Little Bee and other fellow refugees gets released without papers, the natives [Mr. Ayres and others] despites of all risks involved gives permission to these illegal immigrants [refugees] to stay for a week. This also reveals helplessness of the refugees and inability to integrate with the native because of the sovereign state.

In Giorgio Agamben's 'Homo Sacer: Sovereign Power and Bare Life', the project of Homo Sacer Agamben argues that the sovereign power establishes the production of a political order based on the exclusion of bare human life. The law is suspended in this enactment of exception. The human is stripped from the legal status and transformed in relation to sovereign power into a bare life without rights. Agamben argues that this state of exception gives rise to the judicial order. The rule suspending itself, gives rise to the exception- the judicial order suspends its own validity and produces the exception of bare life. In relation to the exception, it first constitutes itself as a rule (Agamben 3, 21).

"The State of Exception" is not to be understood as a special kind of law, such as the law of war, but a suspension of the juridical order. The law employs the State of Exception and it suspends the law

itself. In this manner, the State of Exception both binds the living being to the law and at the same time abandons the living being (Agamben 12). The novel investigates how the refugees are placed in the figure of *Homo Sacer*, and further it examines the room in which sovereign states interact with international agreements and human rights. The author describes how human rights failed the refugees at a time where they were mostly needed. The protagonist and other fellow refugees were living outside a political community and its rights, and so they were at their most vulnerable state with no protective laws as it is set by a nation state and its citizens. Little Bee juxtaposes her life with the colours of grey- now that she has spent two years of her life in the detention camp and is released illegally without any legal documents and hence vulnerable to get killed by anyone. Cleave tries to bring in the mind games played by immigration system to discard the vulnerable refugees. When the refugees wander illegally without papers, then they are unable to find job, earn and survive. As a result, they get caught by the authorities as an illegal citizen and will be deported back to their motherland [place they fled because of war, persecution and violence] and will eventually get killed. As per Cleaves, the immigration system creates a state of exclusion to repudiate the refugees/ asylum seekers.

Agamben evinces humans as animals without speech and political freedom to be included in politics, where the state of exception is declared. He has materialised and exemplified this in the form of camps. The term 'camp' is used to describe those places in which biological and political life, private and public, cannot be distinguished from each other. Chris Cleave has explicitly used this exceptional special arrangement as the 'Black Hill Immigration Removal Centre' - which does not exist in the real

world but stands analogous to other immigration detention centres. Therefore Agamben's notion – state of exception and camps, can be seen reciprocated by the text. The immigration detention centre mentioned in the text stands parallel to the camps proposed by Agamben, where the authorised nation takes the refugees/ asylum seekers into custody even if they had not broken any law, and hence this necessarily becomes a state of siege. The refugee/ asylum seeker is excluded from the protection of law, and hence it is tantamount to include naked life.

The extermination of the refugees/ asylum seekers are contained within the legal order. The notion of Homo Sacer can be analysed in the text. The victim Little Bee is figured as homo sacer might be killed with impunity but not 'sacrificed' in a religious ritual. A number of other refugees in the detention centre are vulnerable to this specific form of violence without the legal consequence of the judicial order. The sovereign state in the text sanctions this law that legitimizes torture, killing without punishment and is believed to have led the death of Little Bee that is not honoured, mourned or memorialised. The example of the razor wire of the detention centre becomes an allegorical aspect of the fears and victimization of Little Bee and other fellow refugees/ asylum seekers of the camp. This reminds the appalling situation of these 'bare and reduced lives' - refugees/ asylum seekers. The notion of the Homo sacer falling as a victim of the abuses in the camp can be connected to the physical abuses confronted by the women refugees/ asylum seekers of the detention centre. The protagonist Little Bee made herself undesirable that she even declined to wash and let her skin grow oily. This is one of the gruesome fears faced in the detention centre of the text. She felt sick with this apprehension of physical

abuse by the detention officers. The protagonist choked herself with a wide strip of cotton around her chest to make breasts look smaller and flat. When the charity boxes for the detainees arrived, she rummaged through the carton boxes to find clothes that hid her shape, and wore loose clothes to make herself look less appealing. She made the detention nurse to cut her hair short with the medical scissors. Many things arrive after death such as policemen, sadness, questions, etc. when the legal immigrant papers are not in order (10). Broadly speaking, there is no flag/ nation for these floating people. These people consist of millions, but are not a part of nation. The wind changes and hope carries away in different direction. The theory of *Homo sacer* applies not only to the detention centres of the host countries, but can also be seen in the homeland of the refugees.

There is a constant fear that palpitates Little Bee's mind. It is the fear of getting deported back to her homeland Nigeria. The protagonist and her sister Nkiruka has seen the proof for exploitations played by the oil companies during the Niger Delta Conflict. Both of them are destined to kill by the authorities of the oil companies. As a result Nkiruka gets raped and killed while escaping. Meanwhile Little Bee gets stowed away in a cargo ship to England, and later the captain of the ship submits her to the authorities of the detention centre. When the protagonist gets deported back to Nigeria, the politicians will find a way to kill or put her in prison. Conditions of the Nigerian prison are even worse. If people ever get out, they do not feel like talking (267). Hence the concept of *Homo sacer* can be analysed in this context. The sovereign ban has captured a certain paradigm of bare life. This figure is stripped of all legal status and is expelled from the political community. *Homo sacer* is exposed

unconditionally with the potential to be killed by anyone. The same applies when one wanders as an illegal immigrant in a host country. According the author Chris Cleave, the immigration detention finds this way to discard the refugees crowding their country.

Little Bee mentions both in Nigeria and the immigration detention centre in UK , treats a human to that of a *Homo sacer*. Oil rebels playing U2 in their jungle camps, and the government soldiers were playing U2 in their trucks. I think everyone was killing everyone else and listening to the same music (192). The guards were tapping their boots to the music of destruction. Hence produces a state of exception and reduces human into bare life. The protagonist had aggrieved instances to bury her excrement in order to clear any traces that would lead the soldiers to find her. I said to myself, Little Bee, the men are coming to tear your wings off (193). It is the space in which bare life is seized by the State. The detention centre did not have any windows because they did not open it. Little Bee was released from the 'Black Immigration Detention', Essex along with three other refugees/ asylum seekers.

It is heart- wrenching to hear the stories, fears and struggles in the detention centre of these fellow refugees/ asylum seekers. These refugees are often portrayed as trembling, confused, etc. except for Yvette- a Jamaican and Little Bee. None of them knew a place to go and stay. They experienced an elixir of freedom after their detention. But it is just a calm before the storm. Despite of not having any legal documents, the changes of getting caught as illegal citizen and could be killed by anyone. Nobody would dare to question as it was the part of the law of sovereign state. After detention, Little Bee finds

shelter with Sarah O' Rourke whom she met during the oil conflict in Nigeria. She had a premonition of getting killed by the men at every second of her life. Ergo the text renders the concept of absolute biopolitical space without any life. This is the condition through which the bare life of *homo sacer* is banished.

It is an appalling situation for the refugees when they are abandoned with the denial of universal human rights which is accidental, but rather inherent to the measures adopted by the nation states. Another hypothesis that integrates in the text is the concept of trauma. This is explained in relation to the conventions of modern literary trauma theory. It is crucial to understand the plight of their mental stability in the light of modern literary trauma theory. This is studied using the theory put forth by the leading trauma theorist Cathy Caruth .

The responses to traumatic experience can be seen through the life of all the characters in the novel. The characteristic of traumatic experience and memory leads to cognitive chaos and the possible division of consciousness. The memory of Little Bee and her sister Nkiruka escaping from the clutches of the men during the oil conflict creates a fathomable impact in the protagonist's life. The focal characters of the text Andrew and Sarah who happened to be present during oil conflicts plays a major role in this concept of traumatisation. When Little Bee and her sister was caught by the men in a beach at Nigeria, bee seeks help from Sarah and Andrew. Sarah tried her best to negotiate with the men to save the girls' life. But they demanded to free the girls only if Sarah and Andrew were ready to cut a finger from their body. Andrew never hoped to get the girls back from the clutches of these men. Hence he

refused to cut his finger (164).

Since the situation was brewing up badly, Sarah decides to cut her finger. Men decides to release only Little Bee, because it was only Sarah who sacrificed for the safety of the girls. Thereafter Nkiruka gets brutally raped and killed by the men. This creates a trauma in Andrew's life. All his emotions, guilt and depression gets bottled up and is bursted when Little Bee calls Andrew to visit his house after her detention. Though Bee never intended to take revenge, but the guilt of Andrew leads to his depression (187).

As per Caruth's theory the dreams and flashbacks of the traumatized thus engage Freud's interest, it is because they bear witness to a survival that exceeds the very claims and consciousness of the one who endures it. The trauma is not just that the experience is repeated after its forgetting but signifies a delay in comprehension and in the absorption of events into the brain's memory.

Hence this eventually compels Andrew to commit suicide. The trauma induces a condition in which the individual has not fully experienced the trauma and will continue to search for a true experience through repetition.

Conclusion

The novel *The Other Hand* puts a massive impact on the readers worldwide. A novel, which portrays horrifying events from the refugee camps (reference to the concentration camps of the Nazi by Agamben) and the sovereign states' exclusion. The language used is easy to decipher with hilarious elements, as part of the concept of Catharsis, to bring a purgation of the dreadful emotions and instances from the life of a refugee. It is tragic, but uplifting and highly intelligent.

This dissertation throws light on how the refugees are placed in the figure of *Homo Sacer*, and further it examines the room in which sovereign states interact with international agreements and human rights. *Homo sacer* and the State of Exception are very closely interlinked. The exclusion of the refugees through the figure of *Homo sacer* is made possible through what is deemed as extraordinary times. By creating zones within the State of Exception, as done by detaining refugees, it makes it possible to exclude them whilst at the same time including them. The *Homo Sacer* and the State of Exception then becomes both the stabilizing concept and the reasoning behind the sovereign states' politics – which can be deemed as sacrificing human rights for the prosperity of the sovereign state.

Literature has always influenced human beings and has empowered language to project the inner world of mankind. Literature illustrates the mental trauma by the literary studies. Trauma has an inherently ethical, social, political and historical dimension. Therefore one cannot limit it only in the psychological studies. It influences naturally to the different fields of the studies in order to show its interdisciplinary role and its profound impact that it has both within and beyond the field of studies.

The literary trauma theory investigates memories, introspection, retrospection, flashback and awful remembrances that are coloured by pain, wound and trauma in the novel. It produces a plot of anxiety in the modern world. Therefore this project revisits the need to rethink the concept of refugees in a holistic manner and to reconcile with the idea of universal equality. Hence the genre of refugee literature plays a vital role to understand the inherited notion of refugee as a passive subject seeking recognition as 'humans'.

Works Cited

Agamben, Giorgio. *Homo Sacer : Sovereign Power and Bare Life*. Standford U P, 1999.

---. *State of Exception*. Chicago: The U of Chicago P, 2005.

Arendt, H. "We Refugees." *Altogether Elsewhere : Writer son Exile*, edited by M. Robinson.

Faber & Faber, 1994.

Caruth, Cathy. *Unclaimed Experience: Trauma, Narrative, and History*. The John Hopkins

UP, 1996.

Cleave, Chris. *The Other Hand*. 2008.

Rogers, Robert. *Freud and Semiotics of Repetition*. JSTOR, 1987.

"Towards Ending Conflict and Insecurity in the Niger Delta Region - Nigeria | ReliefWeb." *ReliefWeb*,

www.reliefweb.int/report/nigeria/towards-ending-conflict-and-insecurity-niger-delta-region.

Accessed 17 Jan. 2022.

"What Is a Refugee? Definition and Meaning | USA for UNHCR." *How to Help Refugees — Aid, Relief*

and Donations, USA for UNHCR, www.unrefugees.org/refugee-facts/what-is-a-refugee/.

Accessed 9 Jan. 2022.

A STUDY ON WORKING WOMEN'S ATTITUDE TOWARDS IMPULSE BUYING BEHAVIOUR IN KOCHI

Project Report

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Under the guidance of

Ms. SHANA XAVY

In partial fulfillment of requirements for award of the degree of

Bachelor of Commerce



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CERTIFICATE

This is to certify that the project report titled “**A STUDY ON WORKING WOMEN’S ATTITUDE TOWARDS IMPULSE BUYING BEHAVIOUR IN KOCHI**” submitted by **RIYA BIJU, SIVAPRIYA N A, SONA K** towards partial fulfilment of the requirements for the award of degree of **Bachelor of Commerce** is a record of bonafide work carried out by them in the academic year 2021-2022.

Supervising Guide

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Assistant Professor

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Place: Ernakulam

Date: 31.03.2022



DECLARATION

We, **RIYA BIJU, SIVAPRIYA N A, SONA K**, do hereby declare that this dissertation entitled, "**A STUDY ON WORKING WOMEN'S ATTITUDE TOWARDS IMPULSE BUYING BEHAVIOUR IN KOCHI**" has been prepared by us under the guidance of **MS. SHANA XAVY**, Assistant Professor, Department of commerce, St Teresa's College, Ernakulam.

We also declare that this dissertation has not been submitted by us fully or partly for the award of any Degree, Diploma, Title or Recognition before.

Place: Ernakulam



RIYA BIJU

Date: 31.03.2022



SIVAPRIYA N A



SONA K

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RIYA BIJU

SIVAPRIYA N A

SONA K

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CHAPTER 1
INTRODUCTION

1.1 INTRODUCTION

In the field of consumer behaviour, an impulse purchase or impulse buying is an unplanned decision by a consumer to buy a product or service, made just before an actual purchase. One who tends to make such purchases is referred to as an impulse purchaser, impulse buyer, or compulsive buyer.

Impulsive buying has long remained a puzzle for marketers as well as consumers. However, it creates substantial business world-wide and this established the interest of many researchers as well as marketers in understanding the phenomenon. The nature of impulse buying is not only problematic to understand but also difficult to predict. What makes an impulse sale so appealing is that these are instant sales and the customer does not give much thought about the price, reliability, usefulness or other consequences.

With a higher number of women being the part of the workforce, and easy access to credit and discretionary income, retailers can't disregard the buying power of Indian women shoppers. Today's women are increasingly knowledgeable about the multitude of brands, retailer services and are more demanding than ever. Hence, this study aims to comprehend the impulse buying behavior of female shoppers.

1.2 OBJECTIVES

- To examine the attitude of salaried women towards impulse buying.
- To evaluate the factors influencing impulse buying
- To determine the advantages and disadvantages of impulse buying.
- To identify the satisfaction level of products that are purchased impulsively.

1.3 SIGNIFICANCE OF THE STUDY

Impulsive buying is a sudden, often powerful and persistent urge to buy something immediately. The impulse to buy is complex and may stimulate emotional conflict. It is more emotional than rational. The present research study is useful and will highlight some of its findings which will be useful to marketer or retailers to understand various factors influencing for impulsive buying behaviour of salaried women in this area. The study has also focused on various impulsive buying tendencies of customers.

This research proposal will provide useful information to the marketers, retailers and advertisers to understand how these extrinsic cues influence impulse buying behavior of working ladies. Since consumers are the central focus of businesses, this study will help retailers to obtain further insight in understanding their consumers' needs deeper and utilize these cues to gain more consumers. This study will help in developing the knowledge on this area of impulse buying behavior of working women. It contributes to researcher in future who is interested to conduct the study on the field of impulse buying behavior. In recent years, with the advancement of women's economic status and self-conscience, impulsive buying has increased. Therefore, it is important to know the factors which determine female consumers' purchases.

It is vital to investigate factors affecting buying behavior of females. The purpose of this study is to investigate the factors affecting impulsive buying and having the major benefits of understanding the concept of impulsive buying behavior of salaried women in the selected area and factors responsible for impulsive buying.

1.4 STATEMENT OF THE PROBLEM

Impulse buying behaviour studies have attracted academic researcher attention because there appears to be a contradiction between what people say and what people do. Especially when it comes to the case of a women, she tends to buy things she come across. And In case of a working women the impulsive behavior would increase as those women are not worried about spending, as the money is self-earned. Marketers are constantly working to how to best attract, manage and retain and also make best use of variety seeking and impulse buying women customer segment. The current research study will be devoted to a better understanding of impulse buying and factors motivating impulse purchase behavior among the women.

1.5 SCOPE OF THE STUDY

The aim of the study is to investigate Salaried Women's attitudes towards impulse buying behaviour. The data for the case study will be collected through a questionnaire for salaried women. The questionnaire will be given to salaried women around Marine Drive - Ernakulam. The questionnaire will give an exact figure on the impulse purchasing behaviour among the salaried Women.

1.6 METHODOLOGY

1) Sampling method

To test the proposed hypotheses, in this study, the sample could represent the population. We select a sufficient number of samples to investigate the population. We take samples from a salaried woman from marine drive - Ernakulam region and the data are collected by a questionnaire.

2) Data collection

We used the probability sampling method by systematic random sampling technique. The survey includes a various group of questions including informational questions, questions for measuring independent variables, moderator variable, and the dependent variable. There are also some open questions for customers to give their opinions to make online shopping better

3)Population

Population what we considered for this project is limited to the residence of Kochi city.

4)Sample Size

Sample was collected from 150 respondents by supplying questionnaire.

1.7 LIMITATIONS OF THE STUDY

- The study was restricted to the people in Kochi only.
- Sample size was small and some respondents could have given biased information
- The study did not include the types of products bought impulsively.
- The study was limited only to women from working category.

1.8 KEY WORDS

- **Economic growth** – Economic growth can be defined as the increase or improvement in the inflation-adjusted market value of the goods and services produced by an economy over time gross.
- **Impulse purchase** - Impulsive buying is the tendency of a customer to buy goods and services without planning in advance.
- **Working women**- A woman who earns a salary, wages, or other income through regular employment.

CHAPTER 2
LITERATURE REVIEW

Introduction

Impulse buying by consumers form a key part of Purchase behaviour. Consumer behaviour theorists suggest that the consumption patterns of a society are determined by its culture. The most common reason people love to shop as many say it's a 'feel-good activity' and in some cases helps pick them up when they are feeling down. Another driving force is the money, many of us desire to save but if one sees a sign which says a limited period offer then they instantly buy the product thinking they may have to pay more later rather they can buy it now. Impulsive shopping is starting to become more common practice, experts say many children and young adults are starting to lose the touch of what it feels like to save up to buy something new.

Impulsive buying can't be characterized for one specific product category. Impulsive buying can be seen in products such as chocolates, clothes, mobile phones and in big-ticket items such as cars, jewellery etc. Impulsive buying means making an unplanned purchase. It is based on an irrational thinking. Marketers try to tap this behaviour of customers to boost sales. There is a great possibility that customers end up making a purchase of products after entering the hypermarket without any actual intent of doing so.

Impulse buying may be influenced by internal states experienced by consumers, or by environmental factors. Researchers have endeavoured to determine if people who frequently engage in this behaviour have some common personality traits. Other researchers have recommended that internal states and environmental signs can serve to trigger the impulse to purchase.

Kannan & Vinayamoorthy, 2014 says, Impulse buying is regarded as an important phenomenon in the context of retail business and marketing. Impulse buying is regarded as an important marketing tool for maximising revenues for businesses as it signifies an extensive amount of products sold in the retail environment. This is because impulse buying has significant influence on consumer buying behaviour and consumer decision making. **Mariri Tendai, Chipunza Crispin (2009)** advocated that the in-store shopping environment is very important determinant of impulsive buying. Factors such as instore background music, store display, scent, in store promotions, prices, shop cleanliness, shop density and store personnel all make up the in store shopping environment. The store ambience can play a truly evocative role by arousing all the senses through different cues. The store ambience plays an important role in making the store more welcoming, friendly and impressive.

Bayley and Nancarrow (1998) defined impulse buying as a "sudden, compelling, hedonically complex buying behaviour in which the rapidity of an impulse decision process precludes thoughtful and deliberate consideration of alternative information

and choices.” Hedonic behaviour is marked with pleasure; in contrast to the utilitarian behaviour where the shoppers seek for functional benefits and economic value in the shopping process. **Muruganantham & Bhakat, 2013; Tinne, 2010** Consumers are generally not search for information and evaluate when having impulse buying. They browse products and start to have product awareness. During the time, they are exposed to various external stimuli which possibly able to trigger their desire to make purchases impulsively. **Engel and Blackwell (1982)** says, impulse buying is an action undertaken without previously having been consciously recognised or a buying intention formed prior to entering the store. Based upon the different description, we conclude that impulse buying involves hedonic purchase decisions which are made inside a store and excludes the reminder purchasing activities.

Beatty and Ferrell (1998) described that Impulse buying refers to immediate purchases which are without any pre-shopping objective either to purchase the specific product category or to fulfil a specific need. They explained that the impulse buying behaviour occurs after experiencing a buying desire by the shopper and without much reflection. The buying of an item which is out-of-stock and reminded during encountering the product are excluded from the purview of impulse buying. **(Verplanken & Herabadi, 2001)** says, This sudden urge to buy something can emanate from various thoughts such as self-discrepancy **(Verplanken & Sato, 2011)**, defined as a difference between actual self and ideal self or a strong urge to bolster self-image .As a result of this strong internal urge, people did more impulse buying and they regretted it more. This suggests that there is a continuum from ordinary to excessive impulse buying, with ‘need to bolster self-image’ being one of the major underlying motivators of this behaviour. The existing studies do not explore it fully and this needs to be delved in detail.

Ainslie, G. (1975) Psychological Bulletin, 82(4) mentioned that Discussions of impulsiveness in the literature of economics, sociology, social psychology, dynamic psychology and psychiatry, behavioral psychology, and "behavior therapy" are reviewed. Impulsiveness seems to be best accounted for by the hyperbolic curves that have been found to describe the decline in effectiveness of rewards as the rewards are delayed from the time of choice. Such curves predict a reliable change of choice between some alternative rewards as a function of time. This change of choice provides a rationale for the known kinds of impulse control and relates them to several hitherto perplexing phenomena: behavioural rigidity, time-out from positive reinforcement, willpower, self-reward, compulsive traits, projection, boredom, and the capacity of punishing stimuli to attract attention.

Dennis W. Rook, Journal of Consumer Research, states that despite the marketing and lifestyle factors that encourage it today, impulse buying is not yet well understood. This is due in part to the longstanding absence of a compelling

conceptualization of this distinctive type of purchasing behaviour. The research identifies: (1) the subjective experiences that distinguish the onset of the buying impulse, (2) how consumers cope with their impulsive urges to buy, and (3) the types of negative consequences they incur as a result of their impulsive buying.

Since after **Clover** started the study of impulse buying in the 1950, more and more researchers contributed to this area of study (Abratt & Goodey, 1990; Beatty & Ferrell, 1998; Hausman, 2000; Peck & Childers, 2006; Rook, 1987; Rook & Fisher, 1995; Rook & Gardner, 1993; Rook & Hoch, 1985; Stern, 1962). Beatty and Ferrell (1998) and Kotler (1974) extended research by exploring the precursors of impulse buying and examining how in-store browsing, influences impulse buying behavior. Impulse buying in most circumstances is activated or triggered by the external cues, as the initiator of impulse. Thus, it is now important to understand the effect of various external factors which are not in controlled of the customer, on customer impulsivity (Kannan & Vinayagamoorthy, 2014). The fundamental framework of impulse buying began with Stern (1962) study where buying behavior has been classified into planned, unplanned and impulse. Planned buying requires information searching and rational analysis, which takes longer time. In contrast, unplanned buying needs not advance planning. While impulse buying is different from the unplanned buying in terms of quick decision making. For impulse buying behaviour, it involves experiencing a sudden, strong, and irresistible urge to buy (Stern, 1962; Sundtrom et al., 2013). Meanwhile, Stern (1962) further identifies impulse buying behavior into few types which includes pure, planned and reminded and suggestion impulse buying. Suggestion impulse buying was introduced by Han and his colleagues (Han, Morgan, Kotsiopulo & Kang-Park, 1991). He modified the Stern (1962) classification mix in context of fashion products and hence suggestion impulse buying also named as fashion-oriented impulse buying. Planned impulse buying is purchase decisions made based on certain conditions including low price promotion of the product. Reminded impulse buying happens when shopper gets reminded the lack of certain goods, in the store. Suggestion impulse buying refers to purchase decision resulting from self-suggestion that the product is needed whereas pure impulse buying is sudden purchase which shoppers do not follow the usual purchase pattern (Madhavaram & Laverie, 2004; Muruganatham & Bhakat, 2013). Consumers are generally not search for information and evaluate when having impulse buying. They browse products and start to have product awareness. During the time, they are exposed to various external stimuli which possibly able to trigger their desire to make purchases impulsively. (Muruganatham & Bhakat, 2013; Tinne, 2010)

The shift in defining impulse buying has drawn particular attention to systematically investigating factors that may underlie or cause impulse buying. This work includes examinations of the mood-impulse buying relationship (Gardner and Rook 1988; Rook and Gardner 1993); the relationship between affective states, in-store browsing, and impulse buying (Jeon 1990); the holistic processing and self-object meaning-

matching in impulsive buying (Burroughs 1996); and the normative influences on impulse buying (Rook and Fisher 1995).

Despite considerable efforts devoted to the theoretical framework, little success has been found in relating personality traits to impulse buying. Although several early investigators addressed the relations between personality traits and impulse buying, they failed to find significant results (Cobb and Hoyer 1986; d'Antoni and Shenson 1973; Kollat and Willet 1967). The lack of significant findings may have been due to the fact that these studies: 1) defined impulse buying as unplanned buying, 2) looked at the relationships of irrelevant personality traits, and/or 3) used inadequate measures for their constructs.

Mattila and Wirtz (2008) found that store environmental stimuli positively affect impulse buying behavior especially when the store environment is perceived as over-stimulating (excitement and stimulation). Stimuli in the retail store environment are likely to affect consumer emotions (Donovan and Rossiter, 1982), which are other variables that have been found to affect the impulse purchases (Rook 1987; Zhou and Wong 2003). Baumeister (2002) argued that high arousal and overstimulation lessens people's self regulation and also tends to reduce people's ability to contemplate through their actions which could further increase the chances of impulse buying. Kaur and Singh (2007) studied the buying behavior of Indian youth and found that sensory stimulants such as the background music, odour, or feel of the products play an important role in shaping the shopping experience of these individuals and could set off impulse buying activity in them. Dave (2010) pointed out that retail stores in Indian settings and found that all of the in-store measures taken by the retailer affects the impulse stimuli of the customers and therefore contributes towards conversion, but overall the promotional mix can act as base for distinguishing a store from others and attracting customers to it. Gupta et.al, (2009) suggested that when size of the store is concerned product display and product prices were the major in-store stimuli in large stores. For small-sized stores, product price was the main factor that attracted impulse purchases. Retail merchandising instantaneously motivates a consumer to buy a product. Merchandising activities act as a silent salesman in the retail outlet (Muruganatham and Kaliyamoorthy, 2005). Zhou and Wong (2003) described that informative and pragmatic aspect of POP poster may influence impulse buying. Consumer's propensity to purchase on impulse receives a further impetus when they see an item on sale (Ramaswamy and Namakumar, 2009). Hulten & Vanyushyn (2011) also observed that impulsive buyers are giving more attention to the in-store displays and combo offerings.

Harmancioglu (2009) suggested that to promote the impulse buying urge and behaviour of new products, marketing managers may emphasise excitement; fun and variety in their promotional activities. Dawson and Kim (2009) observed that impulse buying is linked to up and cross-selling strategies. Yu and Bastin (2010) studied the effect of in-store Point of Purchase (POP) posters in supermarkets and found them to induce impulse purchase behaviours and cost-effective. In-store stimuli are promotional techniques employed to increase impulse buying of products. Some

examples of these techniques include in-store settings, on-shelf positions, price-off promotions, sampling, POP displays, coupons, and in-store demonstration.

Sneath et al. (2009) have argued that impulse buying can also be induced because of depression of an individual and an attempt to improve the mood. Verplanken and Herabadi (2001) found the similar results in his studies and stated that impulse buying is often associated with individuals who want to escape from negative psychological perceptions such as low self-esteem, negative feelings, or moods. The various autistic stimuli which are self generated such as consumer's own thoughts and emotions are also responsible for impulse buying (Hirschman, 1992). Hausman (2000) argued that impulse buying is a hedonic need predominantly motivated by achievement of higher order needs loosely grouped around Maslow's 'hierarchy of needs'. Efforts to satisfy the higher order needs in this hierarchy lead to different types of impulse buying behavior. Sharma et.al, (2010) categorized impulse buying as hedonic behavior that is associated with feelings and psychosocial motivations instead of thinking and functional benefits. Beatty and Ferrell (1998) suggested that impulse purchasing is associated with sensory stimulation and hedonic motivation.

Kollat and Willett (1967) found that the characteristics of consumers and their demographics influence the impulse purchasing. Local market conditions and various cultural forces could also impact the way consumer; go for impulse purchasing (Vohs and Faber, 2007). Dittmar et.al, (1996) observed that gender, as a social category, affects impulse buying. Men tend to involve in impulse buying of instrumental and leisure items which projects their independence and activity. Women tend to buy the symbolic and self-expressive goods which are associated with their appearance and emotional aspects of self. Dramatic increases in personal disposable incomes and credit availability have made impulse buying in retail environments prevalent consumer behaviour (Dittmar et al., 1996). From a socioeconomic point of view, individuals with relatively low levels of household income tend to enjoy immediate indulgence (such as day-to-day savings and sensory stimulation) as opposed to delay-of-gratification. Internal, personal-related factor like educational experience influences the act of impulse buying (Wood, 1998). Mattila and Wirtz (2008) highlighted that social factors influence impulse buying. Social factors include two types: store employees and other customers. Social factor (e.g. employee friendliness) was found to directly influence impulse buying. Store managers might be able to reduce the negative effect of crowding by training their employees to be extra friendly at busy times. Praise from others, such as salesperson, friends during the shopping may increase the chances of impulse purchase (Yu and Bastin 2010). Luo (2005) research work about "influence of shopping with others on impulsive purchasing" revealed that the presence of peers increases the urge to purchase but the presence of family members decreases it. Rook and Fisher (1995) suggested that concealment might encourage impulse purchasing. Shoppers tend to try on new things, styles and fantasize, wrapped in the anonymity of a self-service environment. Kacen and Lee (2002) argued that in a cultural context, the theory of individualism and collectivism

gives important insights about consumer's impulsive behaviour. Cultural aspect's study can further assist both academics and practitioners in developing a better understanding of the impulsive buying phenomenon. Individuals who are more independent engage themselves in greater impulse-purchase behaviour than those who are interdependent in self-concept. In the similar lines, the collectivist consumers are found to engage themselves in less impulse purchase behaviour than the individualist consumers.

CHAPTER 3
THEORETICAL FRAMEWORK

Impulsive buying means getting something spontaneously, without scheduling this purchase or examining the market to compare different options and find a better deal.

People do purchase something on impulse one of the notable reasons among is people make impulse purchases based on their emotions and feelings, past experiences, or if they think that they get a good offer.

Impulse buying is unreflective in that the purchase is made without engaging in a great deal of calculation. Individuals buying impulse are less likely to consider the consequences or to think cautiously before making the purchase. The person's attention is focused on the instant satisfaction of responding to the urge to buy rather than on solving preexisting problem or on finding an item to fill a predetermined need. Finally, consistent with general impulsiveness, impulsive buying is immediate.

While shopper with impulsive buying tendencies may view an impulse purchase as negative and successfully resist the temptation, at other times they too are more likely to rationalize the negative feelings and make the purchase anyway. This indicates that, although impulsive shoppers may deliberate about the purchase on a perceptive level, at some point in the decision-making process the shopper's affective state overcomes their cognitive willpower.

DEFINITIONS

Block and Morwitz (1999) enunciated the definition of impulse purchase as consumer buying an item with little or no deliberation after the result of a sudden, powerful urge. Kacen and Lee (2002) stated that impulsive behavior are more arousing and irresistible but less deliberative when compared to planned purchasing behavior

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- According to Engel and Blackwell (1982) impulse buying is an action undertaken without previously having been consciously recognised or a buying intention formed prior to entering the store. Based upon the different description, we conclude that impulse buying involves hedonic purchase decisions which are made inside a store and excludes the reminder purchasing activities.
- Beatty and Ferrell (1998) described that Impulse buying refers to immediate purchases which are without any pre-shopping objective either to purchase the specific product category or to fulfil a specific need. They explained that the impulse buying behavior occurs after experiencing a buying desire by the shopper and without much reflection. The buying of an item which is out-of-stock and reminded during encountering the product are excluded from the purview of impulse buying.

- Rook and Gardner (1993) defined impulse buying as an unplanned behavior involving quick decision-making and tendency for immediate acquisition of the product.

REASONS FOR IMPULSE PURCHASING BEHAVIOUR

- **To get a feeling of satisfaction or enjoyment from buying :**

Most people impulse buy to make themselves happy and to distract from their current situation. It's an instant way for them to turn things around when they're feeling down or bored with life. Impulses buys also give one that "go to have" mentality; this is where we become so obsessed with something just based on an advertisement which gives us more excitement than anything else could offer at the moment.

- **With discounted or items "on special,":**

Consumers buy on impulse due to a fear of missing out, no one would want to miss the deal and remorse it later.

- **The newness factor the joy of buying something new and shiny:**

You'll feel like your shopping experience will be more entertaining if you get first dibs on those items before all the other deal-hunters do – these days most people want nothing used, so no one wants them anymore"

- **To relieve from boredom:**

Impulse buying might be a way to escape our own boredom. Impulse buyers were less likely to be happy with their purchases and more bored than regular shoppers.

- **As a way to fit in with friends and peers:**

often impulsively purchase items because we want to keep up with "the joneses." We don't just do it for ourselves, but so that our friends and peers will approve of us. This can also lead into the dangerous territory where people are more concerned about others' opinions than living their own lives.

- **It make ourselves feel better about our current situation:**

Impulse buying makes us feel better because it gives our lives a sense of randomness. Most people impulse buy to make themselves happy and to distract from their current situation.

ADVANTAGES OF IMPULSIVE BUYING

- **Immediate satisfaction –**

This probably one of the positive benefits of impulsive buying. The satisfaction of owning something desirable, though short lived, is a rewarding experience.

- **Relaxation and escape –**

When done in small doses over short periods of time with a precise goal in mind, and not as an ongoing or compulsive activity done to excess, shopping as a form of “me time” can be helpful.

- **Social connection –**

Shopping can be a way to spend time with others although without getting to know any of them at all, or very well – when you are in a busy shopping environment, at least you are around people even if there’s no real connection, in the true sense of the word, happening. Ms.Yarrow suggests that “if there’s one antidote to emotional distress it’s human connection”.

- **Lifts your mood –**

Shopping is associated with a sense of achievement. A UK study conducted at Brunel University correlated the effect of shopping on the left prefrontal cortex, a part of the brain that is linked to pleasure and positive thinking. Researchers found that levels of dopamine increase during gratifying experiences such as window shopping.

- **Lowers stress levels –**

When you shop, you socially interact with people around you - whether they're fellow shoppers or sales associates. In addition, shopping with a best friend, partner, or family member provides a bonding experience that can reduce stress levels. In a study published by the American Psychological Association (APA), levels of cortisol, the stress hormone, were tested in kids who were with their best friend versus kids who were alone during a negative experience. Kids who were with their best friends during a negative experience produced less levels of cortisol than their counterparts, which suggests any form of bonding can be good for the mind, body, and soul

- **Live longer –**

Grab a shopping cart if you want to live longer. The act of shopping can reduce the risk of death in the elderly by 27 percent, reports a study published in the Journal of Epidemiology and Community Health. Daily shopping trips were linked to an increase in survival rate with the collection of data of approximately 2,000 elderly men and women aged 65 and over from Taiwan and the statistics of the country's National Death Registration from 1999 to 2008.

- **Exercise –**

For shoppers, it's time to go hunt for those deals and bargains in your exercise gear! Shopping from one department store to the next while you carry heavy bags has been proven to be a good workout for the heart and body.

- **Improves mental acuity –**

The mental, physical, and social engagement of shopping can keep your perception intact even in old age. When you shop, you are physically active by walking, going up and down escalators, and trying on clothes. The mental component of shopping is introduced when you revise your budget, check which on-sale item is better, and calculate your total cost. Socially, you meet up with friends or you hold small-talk with an employee at a department store.

- Impulse buying can really add an element of surprise to your wardrobe. You can't plan for everything and sometimes, you just don't know what you want.
- It also lets you explore some new directions. If something really appeals to you in the shops, it may appeal to one part of your style personality that surfaces sometimes. It's good to have clothes for different parts of your style personality.
- Helps in Understanding Customer Expectations:

Certain impulse buying products such as food items like chocolates and beverages help the companies to know and understand the requirements of their customers. The companies can know about what kind of products do the consumers buy more often and which products can encourage impulse buying in the customers. If a company is producing chocolates that are high in demand and highly inculcates impulse buying behaviour in a customer. After some time the same company will come out with a new product to offer more to their customers but, unfortunately, if that product does not reach the customer and fails to create a market like the other product. This will help a company in understanding the requirements and expectations of its consumers.

DISADVANTAGES OF IMPULSIVE BUYING

Disadvantages of impulse buying It can lead to many buying mistakes. Have a look through all the clothes in your closet you don't wear. You often buy things you don't need. You may already have something similar and it can lead to needless spending. Some of the disadvantages are :

- **Purchasers may not know what they are buying –**

limitation of impulse buys is that the customer purchasing the item may not know as much about how to use and service the product as customers who have more carefully considered their purchases. There can be higher costs associated with supporting such users, that may not be as experienced, or have different expectations, relative to customers who have given more careful consideration to the purchases.

- **It can lead to many buying mistakes –**

Impulsive buying behaviour may lead to purchase of things which are not necessary. Lots of things been left un touch and eventually resulting in waste of money.

- **Living without a budget –**

Money spend that's not budgeted is an impulsive purchase. A budget is a powerful tool that helps keep you accountable for every money that you spend. If you do not allocate your money carefully, those impulse buys tend to add up quickly, even if its just a small purchase here and there.

- **Debt snowball –**

During impulsive buying there is a chance of paying through credit cards. Increased usage of credit cards for impulsive buying may result in shortage of money. Even though credit card is a useful tool, it can be dangerous when not used responsibly and has the ability to put one's personal and financial life in chaos

- **Finances: Lack of Spending Control –**

Money is one of the easiest areas of life where impulsive decisions can get you in serious trouble. It can be easy to have a light hearted attitude about money. After all, you can always earn more. But debt is no joking matter when it can follow you wherever you go and take decades to pay off. Not to mention the fact that a

poor credit score can make it hard to obtain even some of life's basic necessities such as housing or a car.

- **No control on budget -**

Impulsive shopping is done without prior thought & without planning. Acting on impulse many people do shopping but subsequently regret doing so. Impulsive shopping spoils budget & divert funds to none or less utility items.

- **Buying mistakes**

It can lead to many buying mistakes. Have a look through all the clothes in your closet you don't wear. How many of these were impulse buys?

- **Needless spending**

You often buy things you don't need. You may already have something similar and it can lead to needless spending.

- **Short of essentials**

If you buy on impulse continuously, you may end up with many attention drawing clothes in your closet but are short on the essential basics.

TYPES

Four broad classifications of impulse buying

- **Pure Impulse Buying.** The most easily distinguished kind of impulse buying is the pure impulse purchase. This is truly impulsive buying, the novelty or escape purchase which breaks a normal buying pattern.
- **Reminder Impulse Buying.** Reminder impulse buying occurs when a shopper sees an item and remembers that the stock at home is exhausted or low, or recalls an advertisement or other information about the item and a previous decision to buy. The key factor is remembered prior experience with the product, or knowledge of it, which "sparks" the impulse purchase.

- **Suggestion Impulse Buying.** Suggestion buying occurs when a shopper sees a product for the first time and visualizes a need for it, even though she has no previous knowledge of the item. Suggestion buying is distinguished from reminder buying in that the shopper has no prior knowledge of the product to assist her in the purchase. Product quality, function, and the like must be evaluated at the point of sale.
- **Planned Impulse Buying.** Although "planned impulse buying" may seem anomalous, it is accurate. Planned impulse buying occurs when the shopper enters the store with some specific purchases in mind, but with the expectation and intention to make other purchases that depend on price specials, coupon offers, and the like. It is a recently developed consumer buying trait and likely to be a most significant one.
- **Complementary:** A customer buys several things that are complementary to a purchase. For example, a musician who buys a new keyboard might be easily be able convinced to as on some headphones.
- **Fear of missing out:** Purchasing something that is in limited supply or that is on sale out of a fear of missing out

FACTORS AFFECTING IMPULSIVE BUYING

Personal factors

- **Less control:** It is one of the most significant factors that result in impulsive buying. This is a case of impulsivity or lack of control. People with kind of behaviour are less cautious, less careful, less sensible and less rational. They also seem to be more reckless and spontaneous. They make decisions very fast and rapidly. People with lack of control do not follow up with planned activities.
- **Emotions:** Human emotions also a personality trait that influences buy-in. Emotions like anger, happiness, sad, anxiety, etc. results in impulsive actions by people. Most of the times they are negative like fear, anxiety, sad etc. Because it is believed that people with emotions feel better after the impulsive purchase. They also sometimes see it as stress relief action.

External Factors of Impulse Buying: Several studies suggest that impulse buying behavior resulted from the associated of an unplanned purchasing to the exposure to stimulus inside the store. The influence of in-store stimuli like product displays, shelf positions, packaging, product line and price becomes more important for impulse buying than preplanned purchase decisions. External motivation factors of impulse purchase are specific stimuli associated with related variables and with shopping environment.

1. Store Environment-Retailers are known to design store environment in a manner that will

enhance consumers` positive feelings, under the assumption that this will lead to desired consumer behaviors, such as a higher willingness to purchase or stay in the store for longer.

2. Product Characteristics-

Certain products are bought more impulsively than other. The likelihood that a product will be purchased on an impulse depends on the product category, product price, product brand and package, and product distribution.

Product Category: Hedonic products and functional products can be proposed as two categories of products by marketing literature. Hedonic products are mainly consumed for their hedonic benefits.

Product Price: It is an important determinant of impulse buying. Price is a factor that affects impulse purchases an item with unexpectedly low price can make shoppers feel that they are spending less than they originally planned. More specifically, consumers tend to be more impulsive when there are sales or product discounts, low marginal need for the item, short product life, smaller size, and ease of storage. The price of food is an important factor in determining food choice and impulsive purchase, particularly in lower income groups, such as students and young consumers.

Product Brand and Package: product brand is one of the stimuli factors of impulse purchase because of brand`s message.

Product Distribution: The more numerous the outlets in which an item is available, the more opportunities the consumer has to find and buy it.

3.Promotional Activities-

Promotional activities have a direct impact on consumers` impulse buying behavior. In store promotional activities, for example, discount such as “three at the price of two” is a kind of impulse purchase triggers.

Internal Factors of Impulse Buying :Internal factors of impulse buying are related to the different personality related which characterizes an individual rather than the shopping environment. Internal factors denote the individual`s internal cues and characteristics that make him/her engage in impulse buying. Also, some of the internal factors can be called as demographic and social factors.

Other factors influencing impulsive buying

- **The environment of the store:** Impulsive buying also depends on the environment in the store. This exaggerates the shopping requirement of the customer. This is known as 'displaying stimulus as advertising inducement'. Most of the times environment is created in such way that results in impulsive buying. For example, placing a conditioner near a Shampoo will induce impulsive buying.
- **Payment mode:** It is also affected by the mode of payment as if a customer is using debit or credit card to make a purchase then he/she do not have to worry about whether sufficient cash is there or not. This is one of the reason use of plastic money is promoted at retail stores.
- **Brand Affinity:** Impulsive buying is also done when a customer feels some affinity towards the brand. For example, if a customer gets to know about a new product launched by that particular brand, then he/she may end up buying that new product irrespective of the fact whether he/she needs it to not. This is impulsive buying because of brand affinity.
- **Purchasing power:** Impulsive buying is purchasing things, which are not required by the customer, but still purchase is made. This is most of the times influenced by the purchasing power of the customer. Impulsive buying is done mostly by the customer having good purchasing power (high income group) and capacity to purchase goods.

DIFFERENCE BETWEEN IMPULSIVE BUYING AND NORMAL BUYING

Under normal buying circumstances people mainly went through several stages when making purchasing decisions and it include:

1. Need recognition

At the first stage, the buyer recognizes that there is a need for a product or service.

2. Information search

After understanding the need for a product or service, the buyer starts looking for information. They might obtain it from different sources (friends, commercials, mass media).

3. Evaluation of alternatives

Once all the necessary information has been gathered, the buyer starts to evaluate a choice. They might compare key features and pricing, looking for advantages of one tool over all others.

4. Purchase decision

After evaluation, the buyer makes a purchase decision. For example, they start their free trial or purchase a paid plan

5. Post-purchase evaluation

After purchasing the product or service, the buyer assesses whether it has met their expectations. At this stage, they might also leave an online review about the purchase or share their feedback with subscribers, colleagues, or friends.

But under impulsive buying people mainly don't think of all these stages before purchasing. Impulsive buying is the tendency of a customer to buy goods and services without planning in advance. When a customer takes such buying decisions at the spur of the moment, it is usually triggered by emotions and feelings. People do impulsive buying mainly due to the factors written below they are not pre planned or doesn't have any stages above.

- Emotions:

Emotions play a vital role in impulsive shopping. Shopkeepers are very well aware of this thing & they hit on this sensitive point. Children are very soft target & can be attracted very easily. Shopping helps buyer in fighting insecurity & give them feeling of completeness.

- Age:

Age is one of the imperative factors that influence impulsive shopping. It has been observed that younger shoppers are more impulsive as compared to elder ones. However in developing countries like Pakistan where younger generation due to lack of independent source of income is very much dependent on their family no such trend can be observed

- Addiction:

With the changing social scenario shopping is developing as an addiction. People want latest stuff for themselves & family. Social media is encouraging shopping by making people aware of the latest trend & various offers thus evolving shopping as an addiction.

- Stress:

Many people feel that by doing shopping, they will feel happy but they are not aware of the fact that this pleasure is timely & will lose quality with time. By doing impulsive shopping consumers carry illusion that it will be a stress buster but after reaching home they feel guilty & start thinking that they should not have done particular shopping.

- Income:

People belonging to high income group having high disposable income can be assumed to be more impulsive buyer as compared to people with low disposable income.

Future scope

Impulse buying is very important specially when globalization is increasing and horizons of targeting new customers are spreading.

The study relates only to the women respondents of selected a of Ernakulam district therefore, the findings may change if the same conduct in another city as well as irrespective of gender also may focus on the rural and urban population. This study may be expanding with some demographic factors like perception, attitude, belief, personality, lifestyle etc.

The Internal & external stimuli that a consumer is influenced in the buying proposes are;

1. Emotional elements:

The reckless impact and reasonable control are huge on the purchasing propensity for various items. Prudent control and hasty impact are identified with one another; the character is identified with wise control or not. It is estimated that character has a huge impact in purchasing propensity of youthful shopper. Hoch and Lowenstein (1991) explored drive purchasing as contention between the two mental procedure of Cognition-Judicious control and Affection –Impetuous impact uncovering the passionate components creates powers of hunger for guaranteeing suddenness and psychological components encourage assurance. Rook and Hoch's centered around the subjective and passionate reaction which a purchaser experience during a spur of the moment shopping. It has been expressed that arranged and spontaneous buy can be joined by subjective or enthusiastic responses and furthermore recommended that not all motivation buys are going with passionate or potentially psychological responses and subsequently drive purchasing can be experiential or non-experiential.

2. Culture:

The buyer is the individual who chooses his interest in an item. Advertisers produce the items to fulfil their wants and needs, in this manner they expect to impact the purchasing conduct. Both individual and non-singular components affect impacting the buy choice. Culture alludes to the social conduct, way of life, convictions', qualities and craftsmanship in the human culture, this is much a mind-boggling term as it has a few viewpoints. a shoppers' buy choice, his taste and inclinations on items is reflected by the way of life he pursues.

The Product factors that has an impact on consumers impulse buying is;

1. Promotional Activities:

Promotional practices like price discount, buy one get one free and coupon with impulse buying behaviour of the customers.[4] All those factors affecting sales of the business are studied, as some factors increase the sales of business some may tend to decrease the sales. Factors can be of positive or negative influence on sales. The customer is the king of every business, as they play the most significant role in the success of the business. Studying customers' beliefs, needs wants and their buying behaviour can help a business to produce goods thereby positioning in the market and increasing profits. The buying behaviour of a customer is positively influenced by several features of the product, they always aim for a high-quality product at a low price, discount on offers and other factors that affect includes promotional activities.

2. Advertisement:

In the business environment to keep the market going or to withstand in the competitive market, the product must differentiate with that of competitors. To influence the consumer's impulse purchase advertisement is necessary to make them aware of the product as well as to attract them to buy. Higher the awareness' about the product more will be the stimulus to make the purchase decision. Advertisements are the way of providing information regarding the product to the public and thereby marketing products to influence consumers to buy.

Personality Traits and Impulse Buying

Neuroticism and Impulsive buying Behavior:

This trait is associated with the normal personality, which facilitates the tendency of an individual to experience destructive and damaging effects of anxiety, distress, grief, unhappiness, humiliation, embarrassment, antagonism, guiltiness, and antipathy. Individuals scoring high score in this trait might be facing some psychiatric issues, as this trait leads an individual to produce irrational, illogical, and unreasonable ideas, which might end up with negative outcomes.

Agreeableness and Impulsive buying Behavior:

The second personality trait, 'agreeableness' deals with motives for maintaining positive relations with others and is considered a tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. Though there is no concrete evidence to associate impulsive buying behavior with the trait

agreeableness, in line with, we go by the assumption that inclination toward disregarding harmful consequences associated with impulsive buying tendency could serve as a ground to believe that high impulsive buying behavior would be linked to low agreeableness.

Extraversion and Impulsive buying Behavior:

Individuals high on the trait 'extraversion' have an energetic approach to the social and material world and are social, active and have a tendency to experience positive emotions. This sociability means they are more likely to come in contact with salespeople, and given the risk-taking propensity being consistent with the extravert disposition toward excitement-seeking and uncertainty reference, the chances of extraverts indulging in impulsive buying is likely to be more as compared to those low of this trait. Extraversion implied a more impulsive person with lower self-control.

Conscientiousness and Impulsive buying Behavior:

The fourth personality trait 'conscientiousness' describes individual differences in the propensity to be self-controlled, responsible to others, hardworking and goal-directed behavior.

Needless to say, individuals scoring highly on this trait are considered methodical, well organized, and dutiful, while those low on this trait are thought to be less focused and more likely to be distracted from tasks. Also, as researchers have reported that conscientiousness was likely to play a major role in planning for future expenses. (Badgaiyan & Verma, 2014). The individuals, scoring low on this trait, are pretty much careless, do not focus much on their life and the goals to be achieved and can be distracted easily. The individuals scoring high in this trait focus more on their future planning and expenses, which eventually limits them to go for impulse purchases.

Openness and Impulsive buying Behavior:

Of the five personality traits, openness to experience was the strongest predictor of knowledge sharing. However, in organizations that evaluate employees on knowledge sharing and reward them for it (as compared to organizational contexts where knowledge sharing is simply encouraged but not rewarded), individuals with higher levels of openness were less likely to engage in knowledge sharing behaviors. The authors suggested that this difference with prior research may be due to the fact individuals with high levels of openness tend to seek knowledge, rather than share it.

CHAPTER 4
DATA ANALYSIS AND INTERPRETATION

DATA ANALYSIS AND INTERPRETATION

The primary data for this project which attempts to make “a study on Working women’s attitude towards impulse buying behaviour in Kochi” has collected through a consumer survey. The questionnaires were distributed among 150 people representing the working class.

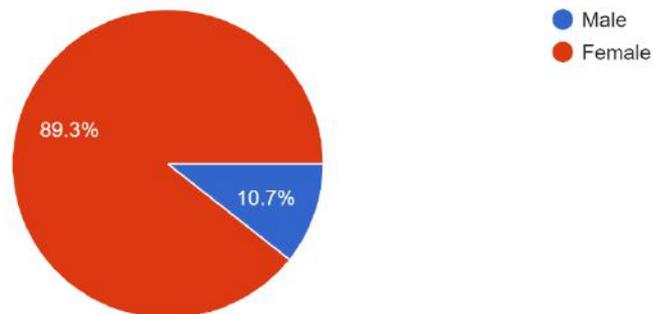
The following tables and graphs are the result of the analysis done on the data collected with the help of questionnaires.

TABLE 4.1
GENDER OF THE RESPONDENT

GENDER	NO. OF RESPONDENTS	PERCENTAGE
FEMALE	134	89.3%
MALE	16	10.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.1
GENDER OF THE RESPONDENT



Inference

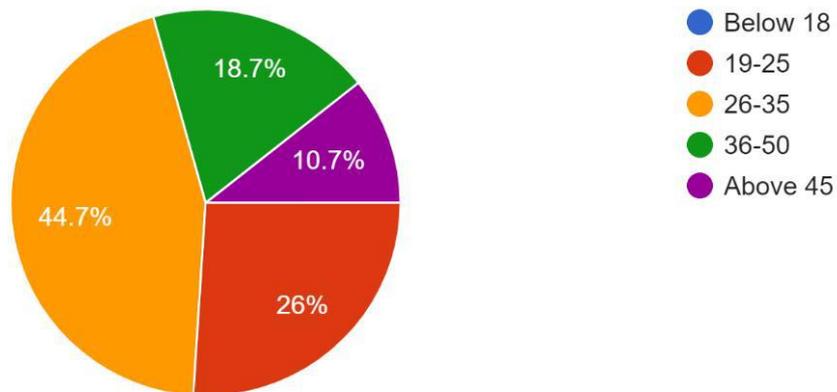
The table 4.1 shows the total number of respondents from the primary data collected from the people. The total number of respondents were 150 and among them 16 respondents were male and 134 were female. The percentage of male was 10.7% and the female was 89.3%.

TABLE 4.2
AGE OF THE RESPONDENT

AGE	NO.OF RESPONDENTS	PERCENTAGE
Below 18	0	0%
19-25	39	26%
26-35	67	44.7%
36-45	28	18.7%
Above 45	16	10.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.2
AGE OF THE RESPONDENTS



Inference

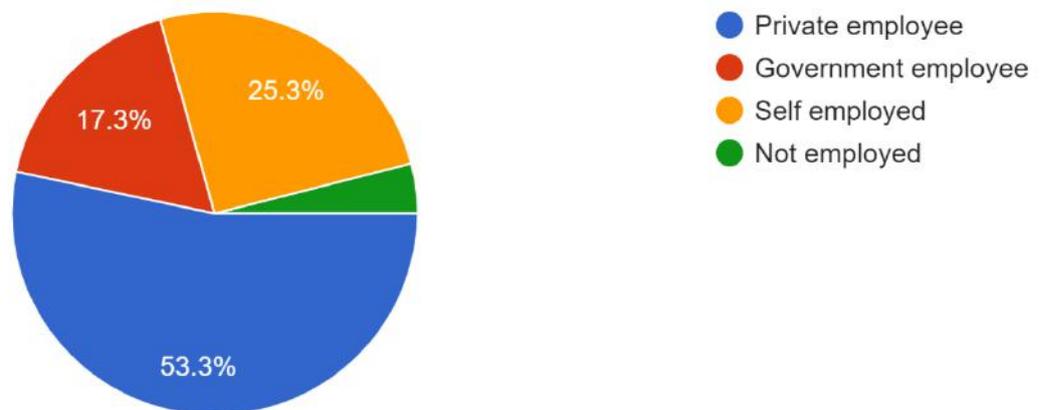
The table 4.2 reveals that majority of the respondent belongs to the age group of 26-35. About 26% of the impulse buyers belong to the age group of 19-25. Around 44.7% of buyers belong to the age group of 26-35 and 18.7% of buyers belongs to the age group of 36-45 and the other 10.7% belongs to the age group of 45.

TABLE 4.3
OCCUPATION OF THE RESPONDENT

OCCUPATION	NO.OF RESPONDENTS	PERCENTAGE
Private employee	80	53.3%
Government employee	26	17.3%
Self employed	38	25.3%
Not employed	6	4%
TOTAL	150	100

Source: Primary Data

FIGURE 4.3
OCCUPATION OF THE RESPONDENT



Inference

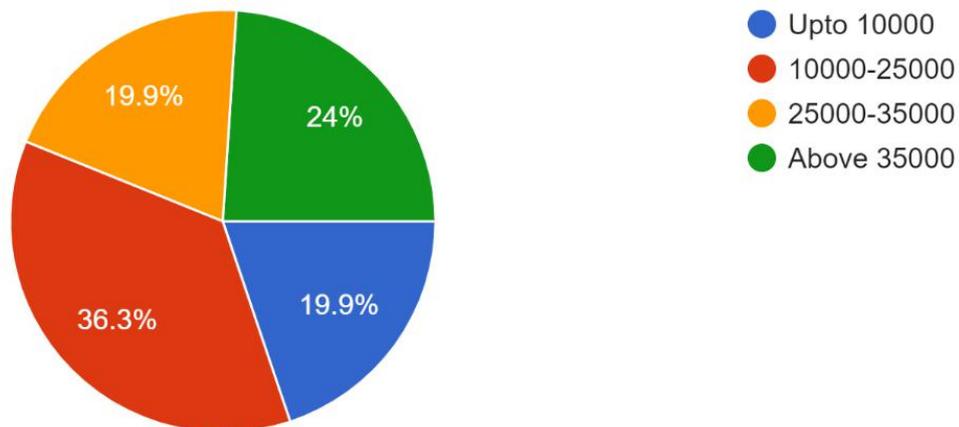
The table 4.3 Shows the majority of the buyers are private employees. About 17.3% impulse buyers are government employees and 25.3% are self-employed groups and the other 4% are not employed.

TABLE 4.4
MONTHLY INCOME OF THE RESPONDENT

MONTHLY INCOME	NO.OF RESPONDENTS	PERCENTAGE
Up to 10000	29	19.9%
10000-25000	53	36.3%
250000-35000	29	19.9%
Above 35000	35	24%
TOTAL	146	100

Source: Primary Data

FIGURE 4.4
MONTHLY INCOME OF THE RESPONDENT



Inference

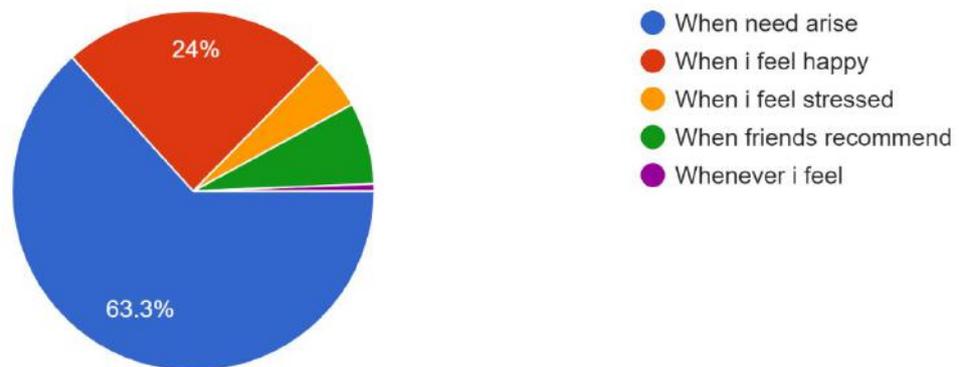
The table and graph 4.4 shows the income of 146 respondents. 19.9% respondents earn up to 10000 and 36.6% earn between 10000-25000, 19.9% earn between 25000-35000 and the rest 24% above 35000. An analysis of the above table gives a conclusion that most of the buyers earn between 10000-25000.

TABLE 4.5
CONSUMERS PERIOD OF SHOPPING

	NO.OF RESPONDENTS	PERCENTAGE
When need arise	95	63.3%
When I feel happy	36	24%
When I feel stressed	7	4.7%
When friends recommended	11	7.3%
Whenever I feel	1	0.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.5
CONSUMER'S PERIOD OF SHOPPING



Inference

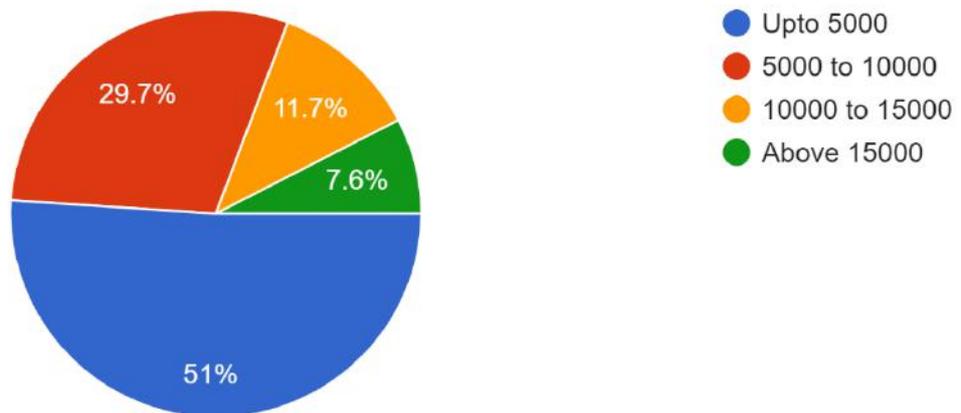
The table 4.5 shows the NO.OF RESPONDENTS and percentage of different period of shopping done by the consumers. 63.3 % of the buyers purchase when need arise, 24% of buyers shop when they feel happy and 4.7% are purchased when they feel stressed and the rest 7.3% and 0.7% when friends recommends and when they feel.

TABLE 4.6
RESPONDENTS SAVINGS FROM SALARY

INCOME	NO.OF RESPONDENTS	PERCENTAGE
Upto 5000	74	51%
5000-10000	43	29.7%
10000-15000	17	11.7%
Above 15000	11	7.6%
TOTAL	145	100

Source: Primary Data

FIGURE 4.6
RESPONDENTS SAVINGS FROM SALARY



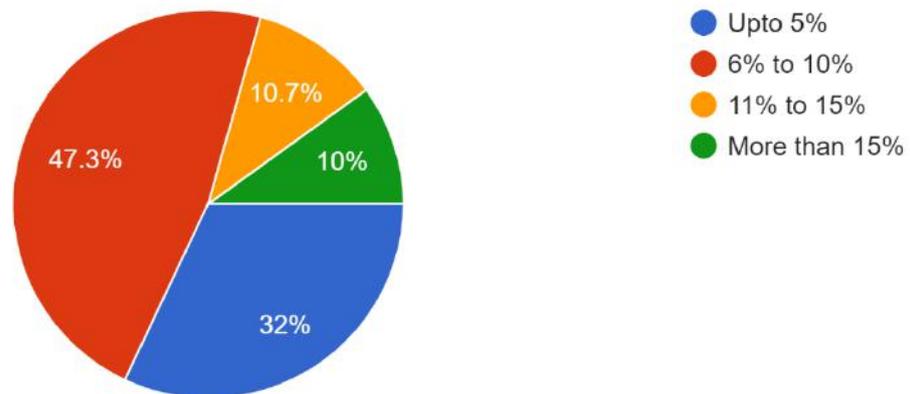
Inference

Table 4.6 shows the respondents savings from their salary. Majority of the respondents saves upto 5000 .29.7% of the respondents saves between 5000-10000 and the 11.7% saves between 10000-15000 and only 7.6% of the respondents saves above 15000.

TABLE 4.7
EXPENDITURE OF SHOPPING FROM SALARY

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
Upto 5%	48	32%
6%-10%	71	47.3%
11%-15%	16	10.7%
More than 15%	15	10%
TOTAL	150	100

FIGURE 4.7
EXPENDITURE OF SHOPPING FROM SALARY



Inference

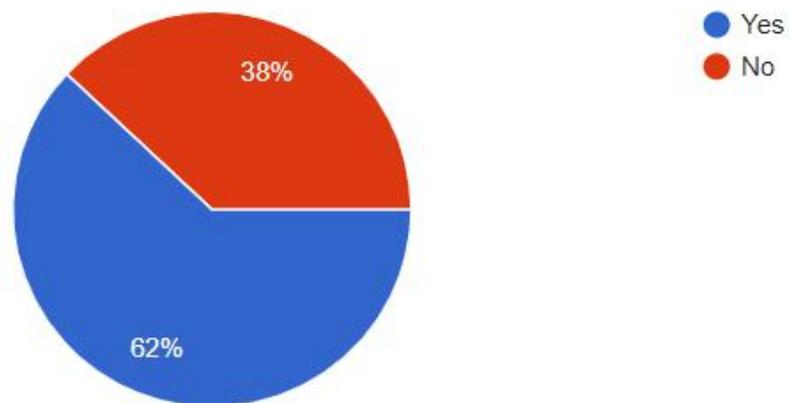
Table 4.7 shows the respondents amount of shopping from their salary. Majority of the respondents spent 6%-10% from their salary for shopping. 32 % of the respondents spent upto 5% from salary and the remaining 10.7% and 10% of the respondents spent 11%-15% and more than 15% for shopping.

TABLE 4.8
IMPUSLE BUYING DISTURBING RESPONDENTS SAVINGS

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
YES	93	62%
NO	57	38%
TOTAL	150	100

Source: Primary Data

FIGURE 4.8
IMPUSLE BUYING DISTURBING RESPONDENTS SAVINGS



Inference

The diagram 4.8 reveals that the majority of the respondents says yes to the fact that impulsive buying is disturbing their savings.

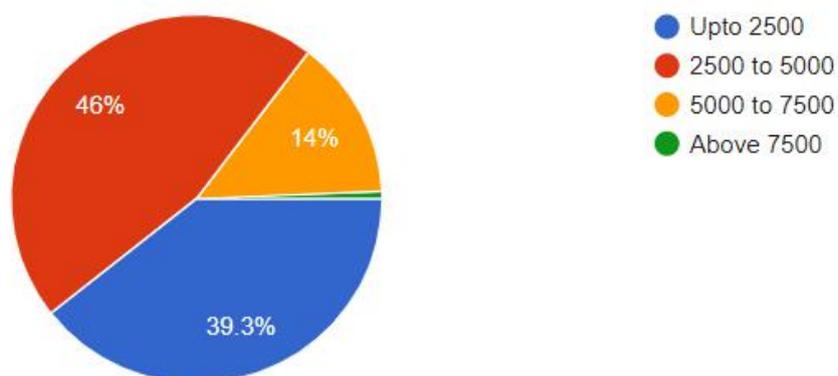
93 out of 150 respondents said yes and 57 out of 150 said impulsive buying does not disturb their savings.

TABLE 4.9
IMPULSIVE BUYING AMOUNT AT THE TIME OF MONTHLY EXPENDITURE

MONTHLY INCOME	NO.OF RESPONDENTS	PERCENTAGE
UPTO 2500	59	39.3%
2500 TO 5000	69	46%
5000 TO 7500	21	14%
ABOVE 7500	1	0.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.9
IMPULSIVE BUYING AMOUNT AT THE TIME OF MONTHLY EXPENDITURE



Inference

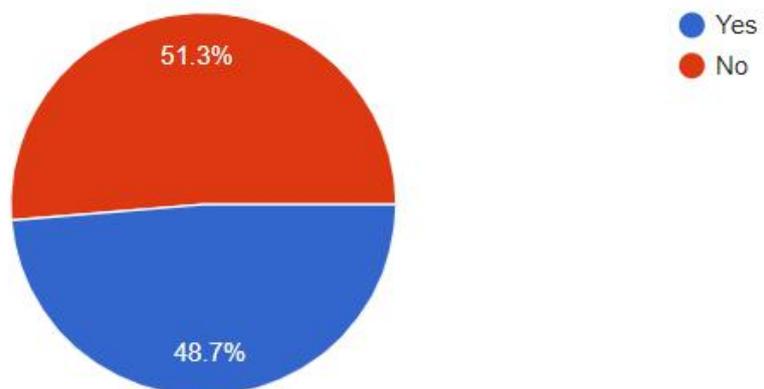
From the above diagram we can see that 39.3% of respondents spend up to 2500 on monthly expenditure. 69 out of 150 people spend from 2500 to 500 which constitutes 46%. Only 0.7% spend above 7500 and 14% spend from 5000 to 7500.

TABLE 4.10
SHOPPING LIST WHILE GOING FOR SHOPPING

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
NO	77	51.3%
YES	73	48.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.10
SHOPPING LIST WHILE GOING FOR SHOPPING



Inference

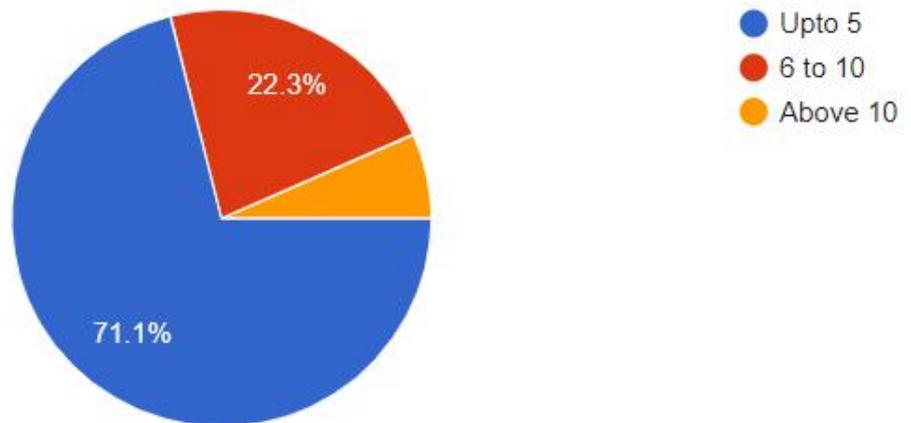
The above table shows that 73 respondents out of 150 only carry shopping list before going for a shopping remaining 77 respondents which consist of 51.3% does not carry a shopping list.

TABLE 4.11
LIST OF ITEMS DEVIATING FROM SHOPPING LIST

NO. OF ITEMS	NO.OF RESPONDENTS	PERCENTAGE
UPTO 5	86	71.1%
6 TO 10	27	22.3%
ABOVE 10	8	6.6%
TOTAL	150	100

Source: Primary Data

FIGURE 4.11
LIST OF ITEMS DEVIATING FROM SHOPPING LIST



Inference

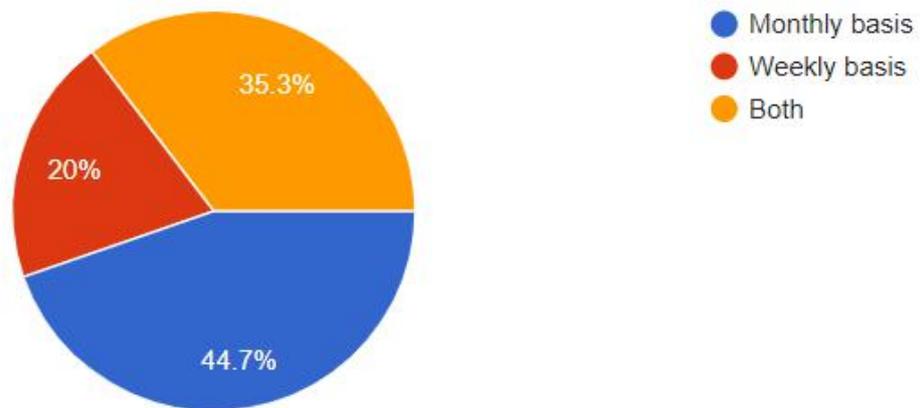
From the above diagram we can see that 71.1% respondents deviate from buying up to 5 items. 27 out of 150 respondents buy 6 to 10 items and 6.6% respondents buy more than 10 items apart from the shopping list.

TABLE 4.12
FREQUENCY OF RESPONDENTS PURCHASE

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
MONTHLY BASIS	67	44.7%
WEEKLY BASIS	30	20%
BOTH	53	35.3%
TOTAL	150	100

Source: Primary Data

FIGURE 4.12
FREQUENCY OF RESPONDENTS PURCHASE



Inference

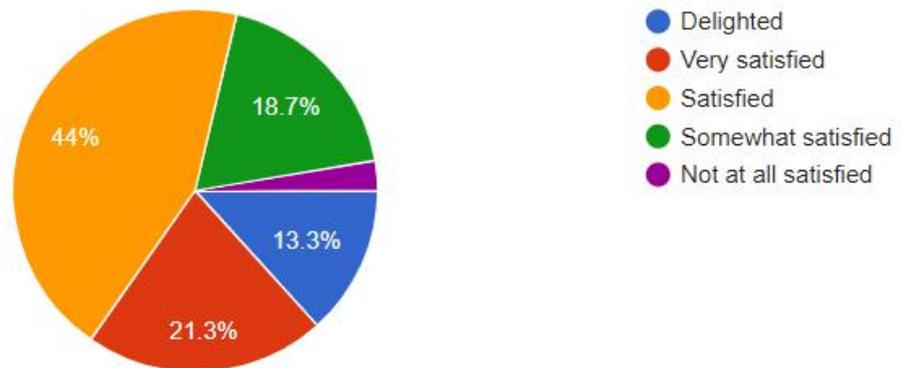
The figure shows a frequency of monthly basis of purchasing of 44.7% having 67 out of 150 respondents. 30 respondents out of 150 do purchasing on a weekly basis and 35.3% does both monthly and weekly purchases.

TABLE 4.13
SATISFACTION OF RESPONDENTS ON IMMEDIATE DECISION TO BUY
THE THINGS

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
DELIGHTED	20	13.3%
VERY SATISFIED	32	21.3%
SATISFIED	66	44%
SOMEWHAT	28	18.7%
NOT AT ALL SATISFIED	4	2.7%
TOTAL	150	100

Source: Primary Data

FIGURE 4.13
SATISFACTION OF RESPONDENTS ON IMMEDIATE DECISION TO BUY
THE THINGS



Inference

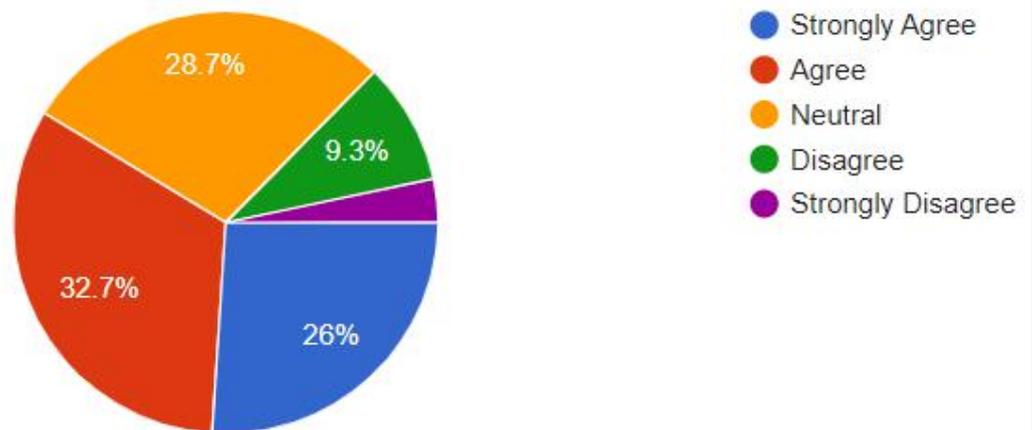
The above table shows that 13.3% of respondents are satisfied with immediate decision to buy things, 21.3% of them are very satisfied with the immediate decisions and 44% that is 66 out of 150 is satisfied with immediate decision to buy things. 18.7% of respondents are only somewhat satisfied with the decision of immediate decision to buy the things and 2.7% of total respondents are not at all satisfied with immediate decisions.

TABLE 4.14
RESPONDENTS WHO MAKE UNPLANNED PURCHASE

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
STRONGLY AGREE	39	26%
AGREE	49	32.7%
NEUTRAL	43	28.7%
DISAGREE	14	9.3%
STRONGLY DISAGREE	5	3.3%
TOTAL	150	100

Source: Primary Data

FIGURE 4.14
RESPONDENTS WHO MAKE UNPLANNED PURCHASE



Inference

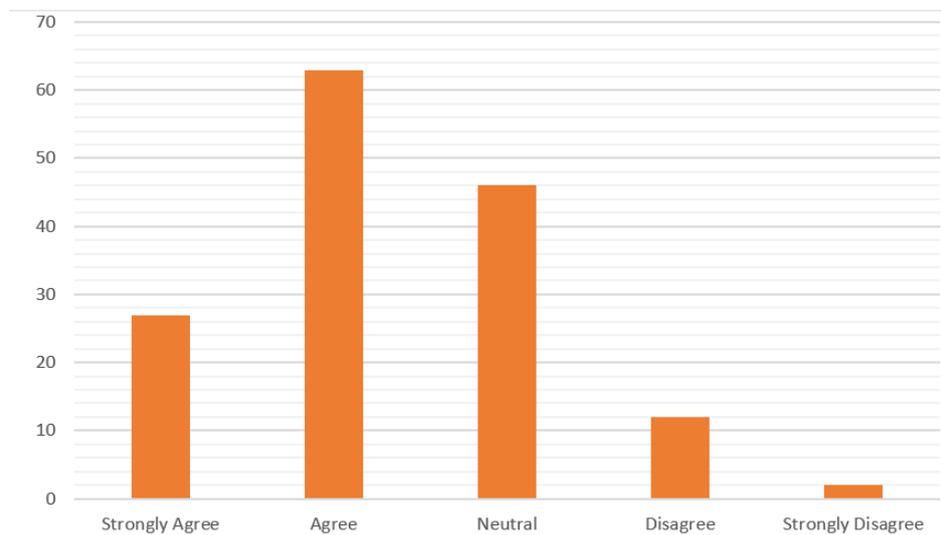
Figure shows that a 26% of respondents strongly agree with unplanned purchases. 32.7% of total respondents agree and 28.7% are neutral. 9.3% disagree with making unplanned purchases and a percentage of 3.3% respondents strongly disagree with making unplanned purchases.

TABLE 4.15
CUSTOMERS OPINION ABOUT FOLLOWING TRENDS IN THE
ECONOMY WITH IMPULSIVE BUYING

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
Strongly Agree	27	18
Agree	63	42
Neutral	46	30.7
Disagree	12	8
Strongly Disagree	2	1.3
Total	150	100

Source: Primary Data

FIGURE 4.15
CUSTOMERS OPINION ABOUT FOLLOWING TRENDS IN THE
ECONOMY



Inference

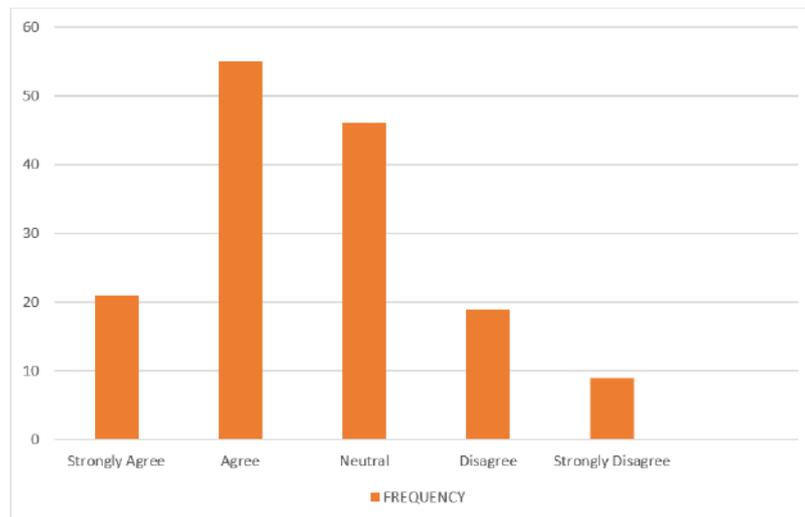
The diagram 4.15 reveals that the majority of the respondents Agree to the fact that impulsive buying allows to catch up with the Trends in the economy. Only 12 out of 150 people disagree with this fact and just 2 out of 150 strongly disagree.

TABLE 4.16
CUSTOMER OPINION ABOUT SHOPPING WHEN THEY DON'T HAVE
MANY THINGS TO BUY

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
Strongly Agree	21	14
Agree	55	36.7
Neutral	46	30.7
Disagree	19	12.7
Strongly Disagree	9	6
Total	150	100

Source: Primary Data

FIGURE 4.16
CUSTOMER OPINION ABOUT SHOPPING WHEN THEY DON'T HAVE
MANY THINGS TO BUY



Inference

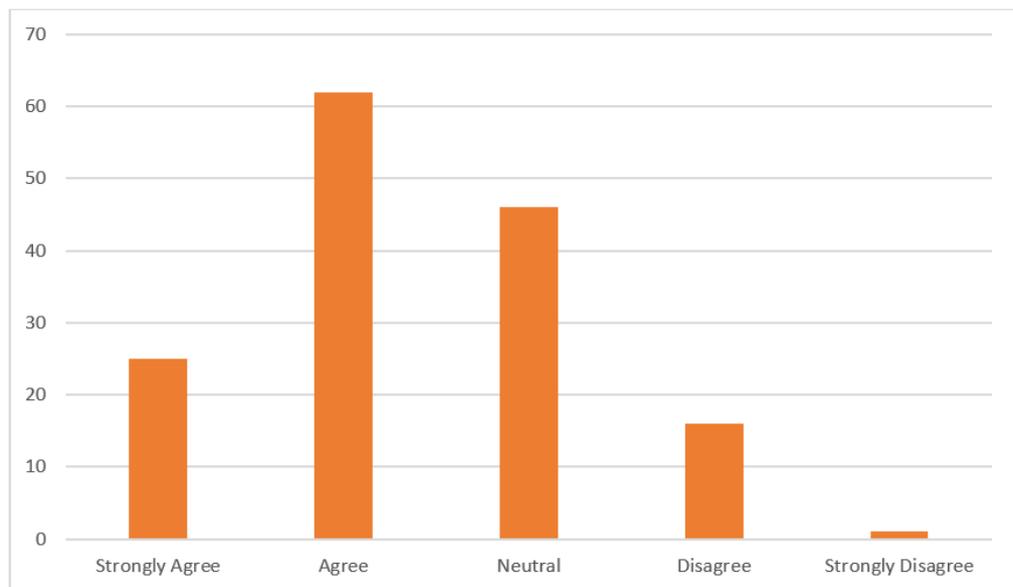
The table 4.16 reveals that about 36.7% people feel it's unnecessary to go for shopping when you don't have many things to buy. Only 6% feel it's necessary to go for shopping when there is no necessity. Also we can find that 30.7% people feel neutral about this fact.

TABLE 4.17
CUSTOMERS OPINION MAKING A LIST PRIOR TO SHOPPING AND
STRONGLY STICKING TO IT

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
Strongly Agree	25	16.7
Agree	62	41.3
Neutral	46	30.7
Disagree	16	10.7
Strongly Disagree	1	0.7
Total	170	100

Source: Primary Data

FIGURE 4.17
CUSTOMERS OPINION MAKING A LIST PRIOR TO SHOPPING AND
STRONGLY STICKING TO IT



Inference

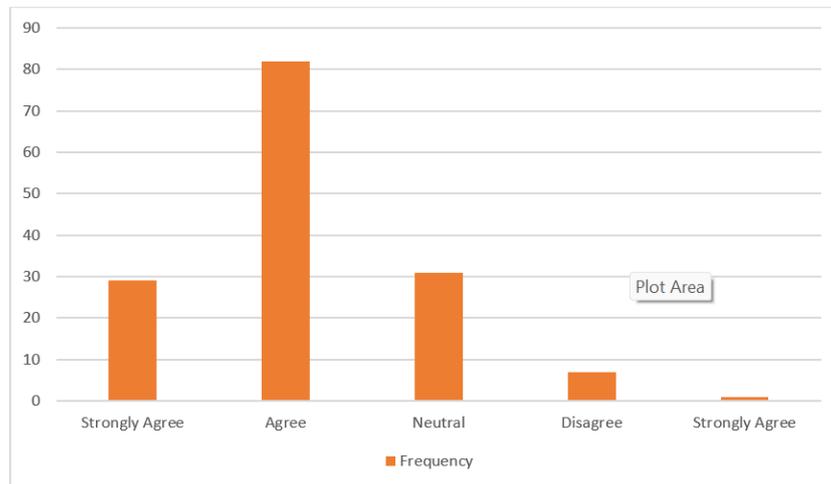
From the above diagram we can see that 16.7% people strongly agree to make a list prior to shopping and 41.3% people also agree to this fact and only 10.7% people disagree and 0.7% don't feel it's necessary to make list prior to shopping.

TABLE 4.18
CUSTOMERS OPINION ABOUT IMPULSIVE BUYING WHEN THERE IS OFFERS AND DISCOUNT

OPINIONS	NO.OF RESPONDENTS	PERCENTAGE
Strongly Agree	29	19.3
Agree	82	54.7
Neutral	31	20.7
Disagree	7	4.7
Strongly Disagree	1	0.7
Total	150	100

Source: Primary Data

FIGURE 4.18
CUSTOMERS OPINION ABOUT IMPULSIVE BUYING WHEN THERE IS OFFERS AND DISCOUNT



Inference

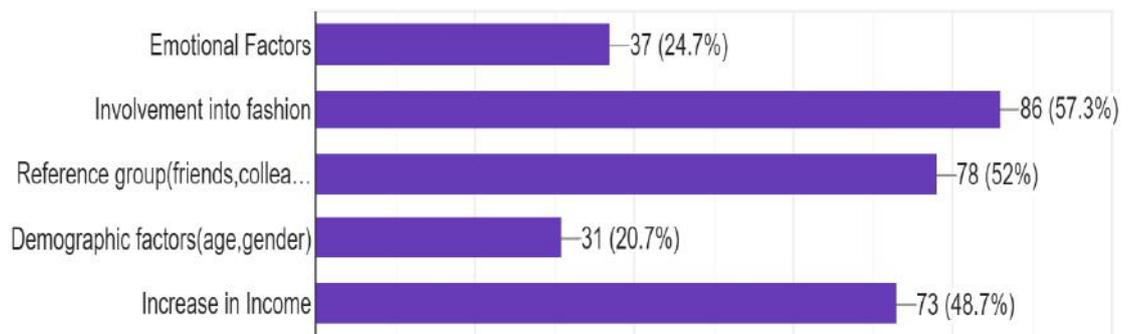
From the above Figure 4.18 its evident that 54.7% of the respondents feel its okay to do impulsive shopping when we come to know about discounts and offers. Only 8 out of 150 respondents feel it's not okay to do impulsive buying even when there is discounts and offers.

TABLE 4.19
INFLUENCING FACTORS OF IMPULSIVE BUYING

OPTIONS	NO.OF RESPONDENTS	PERCENTAGE
Emotional Factors	37	24.7
Involvement into Fashion	86	57.3
Reference Group (friends, collogues)	78	52
Demographic factors	31	31
Increase in income	73	73

Source: Primary Data

FIGURE 4.19
INFLUENCING FACTORS OF IMPULSIVE BUYING



Inference

From the above diagram 4.19 we can infer that the factors which influence the respondents impulse buying is the involvement into fashion, Reference group suggestions, and increase in income, followed by the other factors such as emotional factors and Demographic factors.

CHAPTER 5
SUMMARY, FINDINGS, RECOMMENDATIONS
AND CONCLUSION

4.1 SUMMARY

The study was conducted on the topic “Working women’s attitude towards impulse buying behaviour in Kochi”.

Increased access to education and employment opportunities are improving the social status and economic independence of women. An independent/working women could easily do shopping and purchase things they like without depending others and they mostly tend to do impulsive buying.

The objectives of this study were as follows:

- To examine the attitude of salaried women towards impulse buying.
- To evaluate the factors influencing impulse buying
- To determine the advantages and disadvantages of impulse buying.
- To identify the satisfaction level of products that are purchased impulsively.

The study reveals that most of the respondents do impulsive buying when they are attracted to offers and discounts offered by the shops and they never miss an opportunity to get what they want. The study also reveals that people does impulsive buying to show their involvement into fashion and to satisfy their interests.

The study also points out that even though the respondents tend to save a part of their income, their saving habit is disturbed by the impulsive buying. But anyhow they are satisfied with their immediate decision to purchase things to catch up with the trends in the economy.

4.2 FINDINGS

- Among the respondents, 89.3% were male and 10.7% were female. It’s found that majority of the respondents were Female.
- Among the respondents 44.7% belongs to the age group 26-35. Thus, most of the respondents belongs to this age group.
- More than half of the respondents are private employees with 53.3%, followed by the self-employed and government employed with 25.3% and 17.3% respectively.
- 36.3% of the respondents earns between 10000-25000.
- It is found that 63.3% of the respondents go for shopping only when the need arises
- It is found that 51% of the respondents save up to 5000 from their monthly income.

- It is found that 47.3% of respondents spend about 6% - 10% of their income for shopping. Only 10% of the respondents spend more than 15% of their income for shopping.
- 62% of the respondents feel that their savings are disturbed by impulsive buying and only 38% of respondents said that they never resorted to impulse buying.
- Among the respondents surveyed, 46% of the respondents spend between 2500 to 5000 for impulsive buying out of their monthly expenditure.
- Majority of the respondents (51.3%) do not carry shopping list when they go for shopping and out of these respondents 71% of them tend to deviate up to 5 items from their actual shopping list.
- It is found that 44.7% of the respondents does their shopping on monthly basis and 35.3% of the respondents does their shopping, both monthly and weekly basis.
- Majority of the people feels satisfied with their immediate decision to purchase things and only 2.7% of the respondents feel unsatisfied about this immediate decision.
- Among the respondents, 32.7% of the people feels that they make unplanned purchases and only 3.3% of the people feel otherwise.
- Majority of the respondents agree that impulsive buying helps to catch up with the trends in the economy.
- 36.7% of the respondents feel it's unnecessary to go for shopping when you don't have many things to buy but 30.7% of the people feels its okay to do go for shopping when there are not many things to buy.
- Majority of the respondents believe we should make a list prior to shopping and strongly stick to that list.
- 54.7% of the people agree that its okay to do impulsive buying when you come to know about different offers and discounts and only 4.7% of the respondents disagree with the same.
- According to the responses collected, it is found that involvement into fashion is one of the important factors which leads to impulsive buying. Influence of friends and colleagues and increase in income are also 2 major factors, followed byt factors such as emotional factors and demographic factors.

4.3 RECOMMENDATIONS

The more often you shop, and the more time you spend shopping, the more likely you are to impulse-buy. Therefore, it is better to shop less often.

- It has noted from the study that the response from respondents above age of 45 was very less constituting 10.7% of the total respondents. There were fewer working women who is aged 45+ in the area we concentrated.
- The questions related to products purchased could be involved to get more details about the purchase pattern.
- The monthly income was limited to an average salary of 35000, this could be increased to get the behaviors of people with very high salary.
- The impulsive buying behaviour displayed by consumers in supermarkets may not be applicable in each and every environment.

To customers:

- Make a shopping list before you hit the stores to avoid buying more than you need. Before you buy something, ask yourself whether you really need it or do you simply want it. Thinking about your previous impulse purchases that end up unused and taking more of your storage space might deter you from impulse buying.
- People tend to spend less if they pay in cash rather than credit card because it is psychologically harder to hand out cash. So, try to pay in cash rather than credit card.
- Remind yourselves about your financial goals. To convince yourself not to buy an item that will bring you momentary pleasure. You cannot reach your long-term financial goals if you aren't sacrificing some of your wants in the short run.
- We often buy products with discounts this in turn encourages us to spend more. Whilst buying items at discounted prices are a good way to save money, the general idea is to buy only the things that you need. Make out a shopping list before you hit the stores to avoid buying more than you need.
- Always try to come up with a budget and stick to it whenever you go for shopping. Such a way a large portion of income could be saved. Thus, no harm in leaving a little money in your budget for a fun purchase each month.

4.4 CONCLUSION

Consumers buy impulsively at one time or another in their lives, often without realizing it. Impulsive buying is considered to be a common nature of an individual and it is inevitable because we all have different needs and wants which are endlessly changing and we find a way to satisfy this desire to purchase things. Compared to others, we can see that the people from working category spend most of their money doing impulsive purchases. People from working category are financially independent, therefore they are free to make immediate decisions and they can easily purchase things they desire.

Women are always interested to do shopping and in the case of working women, who is financially independent could do shopping without depending on others. They can buy anything which they wish to acquire with their own money. Human wants are unlimited and they are always attracted to new products and have a tendency to try new things. Presently, there are diverse of products available in market for women and in Kochi we can see lots of shops, boutiques and outlets exclusively for women. And when there are lots of choices available just for women, it helps us to purchase things effortlessly.

There are lots of factors which influence our purchase behaviour and impulsive buying is also caused by these factors. According to the survey conducted, we could find that Women tend to do impulsive purchases to show their involvement into fashion. Sometimes they purchase things which are unnecessary just to catch up with the trend. We can also see that influence of friends and colleagues are also a factor which affects our purchase behaviour and even increase in income leads to impulsive purchases. Women also purchase according to their emotions, when they are happy, they purchase more things and some women does shop to relieve stress.

Impulsive buying helps us to catch up with the trends in the economy and utilize immediate offers and discounts provided by shops and sometimes they are able to attain their long-time wish. But most of the time the saving pattern of the people are disturbed by this impulsive behaviour. Some people make a list prior to their shopping but they also tend to deviate from that list. According to the survey conducted we could find that majority of the people are satisfied with their immediate decision to purchase.

BIBLIOGRAPHY

REFERENCES

- http://ijiset.com/vol3/v3s1/IJISSET_V3_I1_43.pdf
- <https://search.proquest.com/openview/2667bc79eda061330e5e46da8245eaf7/1?pq-origsite=gscholar&cbl=1216357>
- https://www.shs-conferences.org/articles/shsconf/abs/2020/04/shsconf_icsh2020_01057/shsconf_icsh2020_01057.html
- <https://www.frontiersin.org/articles/10.3389/fpsyg.2021.697080/full>
- <https://www.ramseysolutions.com/budgeting/stop-impulse-buys>
- <https://ombori.com/blog/impulse-purchases>
- https://www.researchgate.net/publication/348150741_Visual_Merchandizing_on_Impulse_Buying_Behaviour_of_Working_Wom
- Atulkar, S., & Kesari, B. (2017). Impulse Buying: A Consumer Trait Prospective in Context of Central India. *Global Business Review*, 19(2), 477-493. <https://doi.org/10.1177/0972150917713546>
- Badgaiyan, A. J., et al. (2016). "Impulsive buying tendency: Measuring important relationships with a new perspective and an indigenous scale." *IIMB Management Review* 28(4): 186-199
- Iyer, E. S. (1989). "Unplanned Purchasing: Knowledge of shopping environment and." *Journal of Retailing* 65(1): 40.
- Hamilton, L. (2010). The influence of culture on students' impulsive buying behaviour in the vaal triangle. South Africa.
- Han, Y. K., et al. (1991). "Impulse buying behaviour of apparel purchasers." *Clothing and Textiles Research Journal* 9(3): 15-21.
- Sonali Banerjee; Sunetra Saha(2012) ,"Impulse Buying Behaviour In Retail Stores –Triggering The Senses", *Asia Pacific Journal Of Marketing & Management Review* Vol.1(2).
- Sreedhar Rao Madhavaram, And Debra A. Laverie, ,(2004)" Exploring Impulse Purchasing On The Internet ,"*Advances In Consumer Research* Volume 31.
- Vernon T.Clover (1950) "Relative Important Of Impulse Buying In Retail Stores ," *Journal Of Marketing* 15 : 66-70
- Weinberg, P. & Gottwald, W. (1982) 'Impulsive Consumer Buying As A Result Of Emotions, *Journal Of Business Research*, 10, 43-57.
- https://www.google.com/url?sa=t&source=web&rct=j&url=https://getd.libs.uga.edu/pdfs/kim_jiyeon_200308_ms.pdf&ved=2ahUKEwju7q_duZL3AhVQT2wGHR_ZDMAQFnoECBAQAQ&usg=AOvVaw2Ph4sWQN7OKJzleblioEsV

BOOKS

- *Impulse Buying: Concepts, Frameworks and Consumer Insights* By Dr. C. Nagadeepa, Ms. Deepthi Shirahatti, Ms. Sudha N

- Impulse Buying: The Effect of Decision Time and Product.. by Jung Yun Kim ·

ARTICLES

- Normative Influences on Impulsive Buying Behavior by Dennis W. Rook, Robert J. Fisher
- The Significance of Impulse Buying Today by Hawkins Stern
- The Influence of Culture on Consumer Impulsive Buying Behavior by Jacqueline J. Kacen, Julie Anne Lee

APPENDIX

Questionnaire

1. Sex

- Male
- Female
- Other

2. Age

- Below 18
- 19-25
- 26-35
- 36-45
- Above 45

3. Occupation

- Private employee
- Government employee
- Self employed
- Not employed

4. Monthly Income

- Upto 10000
- 10000-25000
- 25000-35000
- Above 35000

5. When do you go for shopping?

- When need arise
- When I feel happy
- When I feel stressed
- When friends recommend
- Whenever I feel

6. How much of your income do you save?

- Up to 5000
- 5000 to 10000
- 10000 to 15000
- Above 15000

7. How much do you spend from your salary for shopping?

- Up to 5%
- 6% to 10%
- 11% to 15%

- More than 15%

8. Does impulse buying disturb your savings?

- Yes
- No

9. Guess your Impulse buying amount at the time of monthly expenditure?

- Up to 2500
- 2500-5000
- 5000- 7500
- Above 7500

10. Do you carry a shopping list when go for shopping?

- Yes
- No

11. If yes, can you list how many items deviate from shopping list?

- Up to 5
- 6 to 10
- Above 10

12. What is your NO. OF RESPONDENTS of purchase?

- Monthly basis
- Weekly basis
- Both

13. I am satisfied with immediate decision to buy the things.

- Delighted
- Very Satisfied
- Satisfied
- Somewhat satisfied
- Not at all satisfied

14. I am a person who makes unplanned purchase.

- Strongly Agree
- Agree
- Neutral
- Disagree
- Strongly disagree

15. Do you think impulsive buying helps you to catch up with the trends in the economy

- Strongly agree
- Agree
- Somewhat
- Disagree
- Strongly disagree

16. Do you feel its unnecessary to go for shopping when you don't have many things to buy

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

17. I believe we should always make a list prior to shopping and strongly stick on that.

- Agree
- Strongly agree
- Neutral
- Disagree
- Strongly disagree

18. I feel it's okay to do impulsive buying when you come to know about different offers and discounts

- Agree
- Strongly agree
- Neutral
- Disagree
- Strongly disagree

19. What are the factors which influence of your impulse buying

- Emotional factors
- Involvement into fashion
- Reference group (friends, colleagues)
- Demographic factors (age, gender)
- Increase in income

20. Any Suggestions _____

PROJECT REPORT

**A STUDY ON BODY IMAGE SATISFACTION AND PSYCHOLOGICAL WELL-
BEING AMONG YOUNG ADULTS**

Submitted by:

ROSHNA JEROM

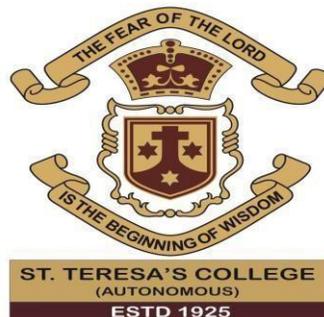
Register No: SB19PSY031

Under the guidance of

MS ANJITHA VENUGOPAL

In partial fulfilment of the requirement for award of the degree of

B.Sc. PSYCHOLOGY



ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Nationally Re-accredited at 'A++' level (4th cycle)

Affiliated to: Mahatma Gandhi University

MARCH 2022

CERTIFICATE

This is to certify that the project report entitled, “A Study on Body Image Satisfaction and Psychological Well-Being Among Young Adults”, is a bonafide record submitted by MS. ROSHNA JEROM, Reg.no. SB19PSY031, in partial fulfilment of the requirements for the award of the Degree of Bachelor of Psychology during the academic year 2019-2022.



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10/1/22

DECLARATION

I, Roshna Jerom, hereby declare that the study presented in the project entitled, “A Study on Body Image Satisfaction and Psychological Well-Being Among Young Adults”, which is submitted to the Department of Psychology, St. Teresa’s College, Ernakulam is a bonafide record of the research work carried out by me, under the supervision and guidance of Ms. Anjitha Venugopal, Assistant Professor, Department of Psychology, St. Teresa’s College, Ernakulam, in partial fulfilment of the requirements for the degree of Bachelor of Science in Psychology and has not previously formed the basis for the award of any degree, diploma, fellowship, title or recognition before.

Place: Ernakulam

Roshna Jerom

Date:

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Thanking you

Roshna

Jerom

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CHAPTER I
INTRODUCTION

1.1. BACKGROUND OF THE STUDY

Body image refers to how a person perceives their own body and how attractive they believe they are. A person's emotional attitudes, beliefs, and perceptions of their own body are referred to as their body image. It is described as a complex emotional experience by experts. Body image refers to how a person perceives their appearance, how they feel about their body, height, weight, and shape, and how they sense and control their body while moving. A person's body image can range from positive to negative, or from satisfaction to dissatisfaction with their body. Many people are self-conscious about their bodies. These concerns frequently center on their weight, skin, hair, or the shape or size of a specific part of their body.

However, body image is not solely determined by what we see in the mirror. According to the National Eating Disorder Association (NEDA), body image is influenced by a variety of beliefs, experiences, and generalizations. Throughout history, people have placed a premium on the beauty of the human body. These views are frequently shaped by society, media, social media, and popular culture, and this can have an impact on how a person perceives their own body.

Body dysmorphic disorder (BDD), eating disorders, and other conditions can all be exacerbated by having a negative body image. People who are constantly bombarded with images from the media may become dissatisfied with their own bodies, resulting in distress and illness. It can also have an impact on one's work, social life, and other aspects of one's life.

When a person has a positive body image, they recognize that their sense of dignity, happiness, honor, self-confidence, pride, self-worth, gratification, and self-esteem are not dependent on their physical appearance. Accepting and appreciating one's entire body, including how it looks and what it can do, having a broad concept of beauty, having a stable body image, and having inner positivity are all components of having a positive body image. The body positive movement aims to help people manage the influence that media messages impose on their body image. According to The Body Positive organization, "Beauty is not a single image, but the active embodiment and celebration of the self."

Body positivity is more than just being happy with one's body's size or appearance. Control and confidence are also important factors. According to research, focusing on developing self-

confidence and a positive body image may aid in the reduction of obesity and the achievement of broader health goals.

A person who has a negative body image is unhappy with their body and appearance. When comparing themselves to others, the person may feel inadequate, ashamed or embarrassed, lack confidence, feel uncomfortable or awkward in their body, or see parts of their body, such as their nose, in a distorted manner. They may request cosmetic surgery to "correct" their nose size, for example, when it appears normal to everyone else.

A person may also pursue unnecessary surgery, risky weight loss practices such as crash dieting — or the incorrect use of hormones to build muscle. According to the NEDA, there is a strong link between eating disorders and negative body image. In some cases, having a negative body image can lead to depression and other mental health problems. BDD affects some people. A person suffering from BDD has a negative perception of a portion or all of their body.

Loneliness does not foster the development of a positive body image. Positive and negative messages about one's body are conveyed by culture, family, and friends. The media, family, and peers can all have an impact on a person's body image. They have the ability to inspire people to believe, even at a young age. The image is often an artificial one.

Discrimination based on race, size, ability, sexual orientation, or age is also a factor. People who are subjected to microaggressions on a daily basis at work and in society may feel as if they do not measure up or are lacking in some way. Illness and mishaps can also have an effect. Skin conditions, a mastectomy for breast cancer, or limb amputation can all cause people to reconsider how they present themselves to themselves and others. All of these elements can have an impact on a person's mental and physical well-being.

According to research, females with higher levels of resilience — as measured by family support, gender role satisfaction, coping strategies, fitness, and well-being — are more likely to have a positive body image. This suggests that emotional insecurity may also play a role in having a negative body image.

Body-shaming conversations include "fat talk," which is when people discuss how "fat" they look or feel. These conversations can result in even more negative feelings, a low mood, or poor eating habits.

Although some people believe that females are more likely to be dissatisfied with their bodies, one study found that female and male adolescents are equally dissatisfied with their bodies.

According to one review, body dissatisfaction appears to persist throughout a person's life. Nonetheless, a study mentioned in the review discovered that older females were more likely than younger females to be satisfied with their bodies. Researchers discovered many similarities between males and females who have a negative body image. However, males seem to be less likely to talk about it or seek help.

The term "psychological well-being" refers to a person's emotional health and overall functioning. Psychological well-being is defined by the author of a study published in *Applied Psychology: Health and Well-Being* as "the combination of feeling good and functioning effectively." High psychological well-being entails being content and performing well. People who have a high level of psychological well-being report feeling capable, happy, supported, and satisfied with their lives. Researchers have also discovered that the absence of distress does not always indicate a person's high psychological well-being.

According to research, people who have a higher level of psychological well-being are more likely to live healthier and longer lives. They are also more likely to have a higher standard of living. A higher level of psychological well-being is also associated with fewer social problems.

Psychological well-being refers to how well one's life is going. It is the combination of feeling good and performing well. Individuals do not need to feel good all of the time to be happy; the experience of painful emotions (e.g., disappointment, failure, grief) is a normal part of life, and being able to manage these negative or painful emotions is essential for long-term happiness. However, psychological well-being is jeopardized when negative emotions are extreme or long-lasting and interfere with a person's ability to function in daily life.

Feeling good encompasses not only the positive emotions of happiness and contentment, but also interest, engagement, confidence, and affection. In a psychological sense, functioning effectively entails developing one's potential, having some control over one's life, having a sense of purpose (e.g., working toward valued goals), and having positive relationships.

There are two important aspects to psychological well-being. The first of these refers to how often people experience positive emotions and feelings of happiness. This aspect of psychological well-being is sometimes referred to as subjective well-being (Diener, 2000). The subjective happy feelings brought on by something we enjoy, as well as the feeling that what we are doing with our lives has some meaning and purpose, are two important ingredients in psychological wellbeing.

Different types of psychological well-being

The term "Hedonic" well-being is commonly used to describe subjective feelings of happiness. It is made up of two parts: an affective component (with a high positive affect and a low negative affect) and a cognitive component (satisfaction with life). It is proposed that an individual experiences happiness when both positive affect and life satisfaction are high (Carruthers & Hood, 2004).

The purposeful aspect of Psychological Well-being is referred to by the less well-known term "Eudaimonic" wellbeing. Carol Ryff, a psychologist, has developed a very clear model that divides Eudaimonic well-being into six key types of psychological well-being:

1. Self-acceptance
2. Environmental mastery
3. Positive relations with others
4. Personal growth
5. Purpose in life
6. Autonomy

1.2. NEED AND SIGNIFICANCE

Body image is how you feel about your body mentally, emotionally and physically. Having a healthy body image goes beyond what's reflected in the mirror. It includes having compassion for yourself and recognizing the strengths and qualities that make you unique beyond your weight, shape or appearance. Body image is also connected to your self-esteem. When you feel valued and respected, you're more likely to feel positive about your whole self, including your body or physical characteristics.

Your self-esteem can be impacted by a number of things including:

- **Puberty:** young people experience a lot of changes during puberty and it can take time to adjust. One feel awkward about their looks or only focus on the things they don't like.

- **Society:** popular culture, including movies, celebrity reality shows and social media tends to portray thin, fit, white people without disabilities as the model of success and health.
- **Peer pressure:** you might feel pressured to look and dress a certain way to fit in or feel accepted.
- **Bullying:** being teased or bullied about your appearance even by well-meaning friends and family members can impact how you feel about yourself and your body.

Feeling badly about your body can impact your behavior and make it harder to interact with others. For example, you might avoid social situations or activities, not speak up or voice what's on your mind. Many of the messages portrayed in the media connect appearance, thinness and weight loss with health, success and status. These messages are everywhere — for example, when people are celebrated or praised for losing weight, foods that are labelled as “good” and “bad”, diet challenges or cleanses that are trending, etc. This focus and false value on appearance can stigmatize people and cause feelings of shame. In reality, everybody has its own naturally healthy weight range, and wellness is possible at any size. It's also healthy and normal for your body and weight to change over time. It's impossible for us to know how healthy or capable someone is based on their body size, even if media messaging tries to convince us otherwise. It's completely understandable to feel more accepting of your body on some days than others. Everybody has value and deserves care.

1.3. PROBLEM STATEMENT

The current study is to examine the relationship between body image satisfaction and psychological well-being.

1.4. SCOPE OF THE STUDY

Human bodies have been studied in a wide range of disciplines, as their presentation and functioning affect nearly all aspects of life. Bodies provide a rich site for research, as they are constructed and experienced on both an individual and social level. Individually, the body is experienced in terms of physically determined experiences, such as health, illness, body size, and ability. Socially, bodies are constructed and appraised through various lenses, including (but not limited to) gender and age. Social experiences, such as being objectified or assessed physically by others (Fredrickson & Roberts, 1997) are often psychologically internalized, and produce a range of responses, such as resisting ascribed roles, attending to the appearance of the body, and experiencing feelings of dissatisfaction or shame about the body. Body image has been defined as “an individual’s appraisal of and feelings about the body” (Cornwall & Schmitt, 1990), and is an important part of our identity and self-concept, as feelings about the body may influence the way we think about ourselves and our capabilities (Chrisler & Ghiz, 1993). Body image is a multidimensional construct including public body consciousness, (i.e., concern with external body attributes, such as feelings about appearance) and private body consciousness, (i.e., internal feelings and overall physical condition) (Miller, Murphy, & Buss, 1981). The term “body image” itself is a global construct that needs specification as to which aspects of the body are being examined and in what way. For this reason, researchers need to be attentive to how questions about the body are asked, what constructs are specifically being measured, and what conclusions are drawn from particular body image measures. The 25-item questionnaire, assess both the subjective appraisal and social-behavioral components of body image. Items were adapted from two different scales; the Body shape questionnaire (Cooper, Taylor, & Fairburn, 1987) and Satisfaction with Appearance Scale (SWAP) (Lawrence et al., 1998). The psychological well-being scale was used to measure the dependent variable (Psychological well-being).

1.5. OBJECTIVES

1. A study on body image satisfaction and psychological wellbeing among young adults.
2. To examine gender difference in body image satisfaction and psychological well being

1.6. LIMITATIONS OF THE STUDY

- The study is done only for one group, it is not a longitudinal study
- There is no age-related comparison in the study
- The study is conducted only in quantitative method
- The questionnaire is developed in a western setting
- The questions that are used in this study are not re-standardized in our cultural age
- The result relies on self-reported assessment

CHAPTER II

REVIEW OF LITERATURE

The cognitive approach to body image dissatisfaction is of the view that people who are preoccupied with body size and shape interpret information related to body image in a biased manner. These individuals are characterized by increased visual attention for the most dissatisfying or ugly body part compared to their most satisfying or beautiful body part. In adults their body image experiences are created and felt. Specifically, these individuals may differentially attend to and remember body-related stimuli, which in turn perpetuate dissatisfaction with their body images (Williamson, & Blouin, 2000). For instance, a teenager preoccupied with weight may interpret another's laughter as directed toward his body size, rather than a funny joke. It is assumed that this biased cognitive processing occurs automatically, outside the conscious awareness of the individual (Williamson, 1996).

Individuals differ in their perceptions of their own body and their perceptions may not fit to the societal standards and expectations. The term body image refers to the extent to which individuals perceive the facts pertaining to their body. This perception of the individuals may result either in satisfaction and dissatisfaction of their body. People with eating disorders tend to over-evaluate their appearance and have high levels of dysfunctional beliefs about appearance. However, having high levels of dysfunctional beliefs about appearance is not common in the general population (Fairburn, 2008). Lin and Reid (2008) examined the role of dysfunctional beliefs about appearance in the relationship between media exposure and anti-fat attitudes. People who spent more time reading fashion magazines had higher levels of dysfunctional beliefs about appearance, which led to high levels of body dissatisfaction and anti-fat attitudes. Dysfunctional beliefs about appearance were found to be predictors of body image, body dissatisfaction, valuing of thinness, and self-esteem (Carroll & Spangler, 2001; Spangler, 2002). Dysfunctional beliefs about appearance were also found to play central roles in causing eating disorders. People with high levels of dysfunctional beliefs about appearance tend to have high levels of dietary restriction (Spangler, 2002)

The role of culture is very crucial in the formation of one's body image (Yam, 2013). Ideal standards of body sizes are culturally specific. These values vary across different cultural groups. Many studies have shown that body image is strongly influenced by external cues such as media images of skinny and average-sized models (Bissell & Zhou, 2004; Cash, Cash, & Butters, 1983; Goresz, Levine, & Murnen, 2002; Watts, Cranney, & Gleitzman, 2008).

Studies show that women in America tend to endorse values of thinness while Women who identify with being Black, has to have bigger, thicker, and more well-formed figures to be more attractive (Craig, 2006; de Casanova, 2004). Another Studies show that Black Americans are less likely to endorse the thin ideal compared to White Americans (Gluck & Geliebter, 2002). Because they feel less pressure to be thin, Black women who identify with Black culture tend to have lower levels of body dissatisfaction (Turnage, 2004). In contrast to Black Americans, Asians tend to endorse extreme thinness in their body ideals, even more so than White Americans (Evans & McConnell, 2003). These findings suggest that the ideal Asian female body is one that is tall, thin, and hourglass shape. Consistent with this body ideal of extreme thinness, Asian women had poorer body image compared to their White counterparts even after controlling for weight (Jung & Forbes, 2007; Wildes, Emery & Simons, 2001). Studies comparing the body images of Asians or Asian Americans with White Americans show equivocal results. Some studies found similar levels of body image among Asian women and White American or European women (Grabe & Hyde, 2006; Koff, Benavage, & Wong, 2001; Robinson (1996); Walde, Bindra, Fairclough, & Westcombe, 1993); others found that Asian women have a more negative body image (Forbes & Frederick, 2008; Kennedy, Templeton, Gandhi, & Gorzalka, 2004); while others still found that Asian women have a more positive body image (Akan & Grilo, 1995; Altabe, 1996). The evidence showing cultural variances in body image primarily consists of studies that asked participants about their membership in cultural, ethnic, or racial groups, and then compared body image between these groups (Altabe, 1998; Barnett et al., 2001; Chen & Swalm 1998; Frederick, Forbes, Grigorian, & Jarcho, 2007; Mintz & Kashubeck, 1999; Sussman, Troung, & Lim, 2007). From the above literature it can be understood that cultural variables shape an individual's orientation towards the body.

Durkin and Paxton (2002) investigated predictors of change in an individual's satisfaction with the body, depression and anxiety after exposing girls of grades 7 and 10 to idealized female advertising images. Stability in their body satisfaction and dissatisfaction, physical appearance, tendency to engage in comparison, internalization of thing body ideals, self-worth, depressive feelings, identity problems and body mass index (BMI) were examined. After a week, the participants were made to view either images of idealized females or fashion accessories. Assessments on state body satisfaction, state depression and state anxiety then followed. For all the grades significant decrease in state body satisfaction and a significant increase in state

depression due to viewing the female images were observed. With the grade 7 girls, decrease in state body satisfaction was predicted by stable body dissatisfaction and body mass index, while significant predictors of decreases in the measures of negative affect included internalization of the thin-ideal and appearance comparison. With the girls of Grade 10, decrease in state body satisfaction and the observed increase in state depression was predicted by internalization of the thin-ideal, appearance comparison and stable body dissatisfaction. The findings point to the significant influence of idealized body images on psychological variables. Studies on body image for the past 50 years regarding psychological well-being revealed that women have higher levels of depression and lower self-esteem than men (Nolen-Hoeksema, 2001) in relation to dissatisfaction with body image. Other studies suggest that women have generally higher body dissatisfaction than men. Besides changes in weight, participants in weight loss programs often report improved life satisfaction and feeling more positive about their bodies and their new-learned abilities, such as being physically active and self-managing their weight. Research has shown that these psychological improvements can be associated with weight changes (Blaine, 2007; Maciejewski, 2005). While treatment-related psychosocial changes (improved body image) are considered valuable outcomes per se and a natural consequence of losing weight, they are not necessarily viewed as mediators or enabling factors for behavior change. Myers and Rosen (1999) found that obesity stigmatization is a common experience and can lead to greater psychological distress, further body image dissatisfaction, more attempts to cope including use of food and even more severe obesity. Psychological well-being, family functioning, extraversion, perceived physical attractiveness and weight reported by adolescents students revealed that girls were significantly more likely than boys to be dissatisfied with their weight and physical appearance, and these factors explained significantly more variation in self-esteem and psychological well-being than other psychological variables (Delfabbro, Winefield, Anderson, & Winefield, 2011). With the data relationship between body dissatisfaction and self-esteem for adolescent girls was not moderated by school type (Delfabbro, Winefield, Anderson, & Winefield, 2011).

Body satisfaction is prone to the focusing illusion. The research design was descriptive statistics and intercorrelation. A study conducted by Lukasz Dkaczmarek, Jolanto Enko(2016); Found that most people have a misconception that people who are satisfied with their body are happier. However, people tend to overrate the influence of some factors on their happiness. This phenomenon is stormed has the focusing illusion. The aim of the study was to examine the focusing illusion in relation to body dissatisfaction. In this study there were 97 participants

in which 71% had women aged between 19 and 36 years. The scale used in this study was the item satisfaction with life scale (SWLS; Diener 1985) to measure global cognitive judgments in one's life. Body image satisfaction scale was also used to assess if a person is satisfied with their height, weight, body shape, Waist, hips, thighs, Stomach, face, body build and shoulder.

Adolescents tend to worry more about some parts of their body, This differs according to gender. The ideal body image can vary from person to person. There is an increasing pressure during adolescence for males and females to desire a body shape that conforms to the "ideal". When we look at the level of being affected by negative body image in adolescents it differs according to gender. Female Adolescents are experiencing more body dissatisfaction than male adolescents. The Body Image scale and Body Image Scaling Strategies scales from the data collection tools were applied to 710 students with an age range of 14-15 in the 9th grade of high school. Demographic form, Body Cathexis Scale, Body Image Coping Strategies Scale (BICSS) are the instruments that are used in this study. The data obtained in the study were analysed using SPSS (Statistical Package for Social Science). To compare quantitative continuous data between two independent groups, the T-test was used. Pearson correlation analysis was applied among the continuous variables of the study. In this study, adolescents females negative body image was found to be significant as compared to male adolescents. This study has shown how adolescents differ from their body images as well as their satisfaction with certain body parts and functions regarding to gender.

Psychologically body image among female adolescents correlates with anorexia nervosa, its symptoms include poor appetite, severe weight loss, and weakness. Scientists believe that body image is characterized by distortion and disorder. On the other hand, Bulimia Nervosa correlated largely with the body image. The biological theory advocates found that the first kins of anorexia nervosa patients are more likely to have bulimia nervosa, Anorexia nervosa patients affected closed relatives upto eight times compared with individuals other than relatives. The prevalence of the disorder of an infected family member with his brothers and sisters or twins percentage scored (6-10%) compared to (1-2%) with nonrelatives (Dosoqi, 2006; Othman, 2001). Chemistry disorders, such as hormonal disorders (genetic or caused by thyroid gland enlargement) that affects the metabolism, Brain cell damage and taking antidepressant and antihistamine medications may increase appetite and leads to hyperthyroidism which correlates with anorexia nervosa. While anemia, diabetes, pregnancy convulsions, placenta infarction, birth heart problems, and birth problems correlates with bulimia nervosa. Frustration release occur according to the psychoanalysis theory by eating

lots of food. The theory attributes excessive eating to the individual's exposure to internal and external conflict, so bulimia becomes the way to express aggression because of depressed feeling. The study aimed at examining the relationship between body image satisfaction and bulimia nervosa among students which were randomly selected. Total number of participants that were present for the study was 337 students. The instrument that was used here was bulimia nervosa test which is designed by Shqair (1999). Validity and reliability of bulimia nervosa test and body image test were established, The total number represented the population of the study; the sample selection was in random. The students received the test papers tests and instructions to select items answers, Data collection and analyses lasted for three weeks. The study included the variables of body image satisfaction and bulimia nervosa and gender.

Psychological well-being is the primary goal of human characterized by the necessity to psychologically feel better and I related to individuals feeling about their daily activities and personal feelings disclosure (Reynolds, 2001; Duan,Guan anfd gan, 2016; Thomson, Lockyegianettr, Camic, and Chatterjee, 2018). This study aims at analyzing psychological well-being of pre-service teachers as a basis for developing their guidance and counselling services, A classic twin design was u

sed to decompose behavioral variance characteristics of psychological well-being of 132 teachers as subjects randomly selected. Psychological well-being was measured using the 14-item Ryff Psychological Wellbeing scale. The results show that guidance and counselling services had to develop psychological well-being of the pre-service teachers, to help them remember life events in a more positive manner, which results in happier life. Conversely pre-service teachers, to help them remember life events in a more positive manner. Which resulting in happier life. Conversely, pre-service teachers with a low level of psychological well-being was important in the development of guidance and counselling services to prepare pre-service teachers well-being in the future. Internal consistency values (coefficient alpha) 14-item Ryff Psychological Wellbeing Scale for each dimension varied between 0.86 and 0.91 indicating high reliability of the scale. Correlation coefficients with the 20-item parent scale for each varied between 0.83 and 0.99 indicated a higher level of validity for the scale. The response item of each question has a range of 1 to 6. If the statement is positive, response 6 shows a strong agreement. Meanwhile, for a negative statement, response 6 shows strong disagreement. High score indicates a respondent has good psychological well-being and vice versa. The psychological well-being of pre-service teacher in Indonesia was categorized low and high. It shows that a career shift from extrinsic choices to intrinsic understanding. This study developed

guidance and counselling service using well-being counselling as an effort to help individual in accepting their strength and weakness, having a positive relationship with others, controlling their behavior, participating and adapting to the environment, having a purpose in life, and developing the self-potential.

CHAPTER III
THEORETICAL FRAMEWORK

DEFINITIONS:

The American Psychological Association (APA) defines body image as “the mental picture one forms of one’s body as a whole, including its physical characteristics and one’s attitudes toward these characteristics.”

Body image can be described as evaluations of both positive and negative emotions of ones own body parts and their characteristics by himself or herself. It is a complex construct of several components such as mental and emotional components, perceptual components and behavioral components. Many studies have been conducted related to negative body image and has well- defined that negative body image is associated with a range of adverse health outcomes, including low self-esteem, depressive mood and eating disorder symptoms.

An individual with negative body image constantly criticizes and compare themselves with images from the media and get dissatisfied with their own bodies, resulting in distress and illness. In contrast, an individual with positive body image that their sense of dignity, happiness, honor, self-confidence, pride, self-worth, gratification, and self-esteem are not dependent on their physical appearance. Accepting and appreciating one's entire body, including how it looks and what it can do, having a broad concept of beauty, having a stable body image, and having inner positivity are all components of having a positive body image.

Having a negative body image can impact individual’s overall quality of life whereas having a positive body image can enhance overall quality of life.

Body image has three dimensions. They are cognitive, subjective and behavioral. The cognitive aspect is related to the perception of their physical appearance that is weight, size and body shape, The subjective dimension is related to satisfaction or concern and anxiety about the appearance and the behavioral aspect is associated with avoidance of exposure as well as anxiety and discomfort. Although body image has several dimensional structures, it is often defined as a degree of satisfaction about the appearance (size, shape and general appearance). Several studies have shown that the perceived difference between appearance and ideal body image can lead to considerable dissatisfaction.

Psychological well-being refers to how well one's life is going. It is the combination of feeling good and performing well. Individuals do not need to feel good all of the time to be happy. The

experience of painful emotions (e.g., disappointment, failure, grief) is a normal part of life, and being able to manage these negative or painful emotions is essential for long-term happiness. However, psychological well-being is jeopardized when negative emotions are extreme or long-lasting and interfere with a person's ability to function in daily life. Psychological well-being is positively correlated with measures of physical health (Ryff et. al., 2006).

The basic concept of psychological well-being has almost always revolved around the balance between positive and negative affect and life satisfaction (Bradburn, 1969). Discussions of psychological well-being have emphasized short-term happiness as opposed to being able to overcome life's challenges, for example having a sense of purpose and direction, achieving satisfying relationships, and gaining self-realization (Ryff, 1995).

Ryff combined various studies for a more cumulous definition of psychological well-being.

She combined theories from developmental psychology, life span theories, and clinical psychology. These theories included Maslow's (1968) conception of self-actualization, Roger's (1961) view of the fully functioning person, Jung's (1933) formulation of individuation, Allport's (1961) conception of maturity, Erikson's (1959) psychosocial stage model, Buhler's (1935) basic life tendencies that work toward fulfillment of life, and Neugarten's (1968) descriptions of personality change in adulthood and old age (Ryff, 1989).

After combing all of these theories Ryff provided a multi-dimensional model of psychological well-being using a six-measure scale. The six measures used to yield an overall score on psychological well-being are: self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life, and personal growth (Ryff, 1989). Each measure is briefly described below:

Self-acceptance: the most recurring criterion of well-being that is most evident in the previous perspectives is the individuals sense of self-acceptance. It is defined as the central feature of mental health as well as characteristic of self-actualization, optimal functioning and maturity.

Positive relation with others: This refers to establishing and maintaining warm and Satisfying relationships and ties by way of displaying affection, empathy, and concern for others. Ryff (1989c) suggests that the central component of mental health is the Ability to love, and those who have stronger self-actualization show stronger feelings of empathy and affection for human beings and are capable of greater love, profound

Friendship, and complete identification with others.

Autonomy: Many studies emphasize on qualities such as self-determination, independence, and the regulation of behavior from within. Self-actualizers are described as showing autonomous functioning and resistance of behavior from within.

Environmental Mastery: The individual's ability to choose or create environments suitable to his or her psychic conditions is defined as a characteristic of mental health. Environmental Mastery is the ability to choose and create an environment to meet personal needs, feeling competent to manage one's responsibilities in everyday life and to manage one's life and surroundings.

Purpose in life: Purpose in life refers to having goals in life, finding meaning in ones efforts and challenges and holding beliefs that give purpose to life. It involves a sense of purpose, direction and intentionality. Ryff (1989c) states that people who show positive psychological functioning would have goals, intentions, and a sense of direction in his/her life, all of which contribute to the feeling that life is meaningful.

Personal growth: Personal Growth is a prominent component of psychological wellbeing. It is being open to new experiences for growing and developing one's potential to be effective and knowledgeable. It feels good to make progress towards one's goals. It feels even better when goals are consistent with one's motives. Ryff suggests that positive psychological functioning that requires one continues to develop his/her full potential, make the most of one's skills, and try to reach his/her potential.

Overall psychological well-being is a combination of all six of the subscales previously mentioned. Self-acceptance is one of the phenomena that appears over and over again when examining the criteria of well-being. An individual who scores high on this measure will view oneself positively, accepts the good and bad qualities that make up who they are, and accepts their past life (Ryff, 1995).

Theories associated to body image and psychological well-being:

Cognitive theory of Body Image

The cognitive approach to body image dissatisfaction is of the view that individuals who are preoccupied with body size and shape interpret information associated with body image in a very distort manner. Specifically, these individuals may differentially attend to and remember body-related stimuli, which successively perpetuate dissatisfaction with their body images (Williamson, & Blouin, 2000). Further “individuals may judge ambiguous situations or stimuli during a manner congruent with their negative beliefs regarding their appearance” (Jackman, Williamson, Netemeyer, & Anderson, 1996). For instance, a youngster preoccupied with weight may interpret another's laughter as directed toward his body size, instead of a funny joke. It's assumed that this biased cognitive processing occurs automatically, outside the conscious awareness of the individual (Williamson, 1996).

Developmental And Socio-Cultural Theories of Body Image

Developmental and sociocultural theories explain how one's body image develops. An understanding of those theories lends considerable insight into understanding why a negative body image has been shown repeatedly in obese populations. Developmental theorists have focused on the importance of childhood and adolescence as a critical period during which the event of body image occurs (Heinberg, 1995). Factors like pubertal timing and teasing are implicated as variables, which can contribute to body image development. Socio-cultural theories have targeted social comparison and socio-cultural messages regarding appearance and sweetness as important factors within the development of body image. Sociocultural approaches seek to grasp human behavior by examining how cultural values influence

individual values and experiences, and the way these values are reflected during a person's cognitions and behaviors (Cash & Pruzinsky, 2004; Jackson, 2004).

In particular, social expectancy theorists argue that cultural values shape how individuals perceive and evaluate others, which this, in turn, influences how others evaluate themselves (Jackson, 2004). In terms of body image, this theory posits that within a culture, people share socially defined standards of attractiveness, in addition as expectations about those that are considered attractive. As a result, they behave differently towards individuals that are considered to be attractive, and successively, this differential behavior results in differences in how individuals reply to such treatment. Finally, these behavioral differences in treatment of people deemed attractive or unattractive by cultural standards shape self concept (Jackson, 2004).

Body Image Perception and Psychological Factors

People with eating disorders tend to over-evaluate their appearance and have high levels of dysfunctional beliefs about appearance. However, having high levels of dysfunctional beliefs about appearance isn't common within the general population (Fairburn, 2008). Lin and Reid (2008) examined the role of dysfunctional beliefs about appearance within the relationship between media exposure and anti-fat attitudes. people that spent longer reading fashion magazines had higher levels of dysfunctional beliefs about appearance, which led to high levels of body dissatisfaction and anti-fat attitudes. Dysfunctional beliefs about appearance were found to be predictors of body image, body dissatisfaction, valuing of thinness, and self-esteem (Carroll & Spangler, 2001; Spangler, 2002). Dysfunctional beliefs about appearance were also found to play central roles in causing eating disorders. People with high levels of dysfunctional beliefs about appearance tend to own high levels of dietary restriction (Spangler, 2002).

Psychodynamic perspective by Kruger

Psychodynamic perspective by Krueger (1989), points to the body and its evolving mental representations, which forms the foundation of a sense of self. Freud identified the body ego as the most inclusive term “body self” which Refers to a combination of the psychic experience of body sensation, body Functioning and body image. Thus, body image is defined because the developmentally evolving mental representation of the body self. The body appears within the sort of dreams, metaphors and symptoms as a symbolic vision of inner experiences. The body self emerges through a developmental hierarchy of experience, making progress from images to words to organizing and to drawing conclusions that regulate the whole self-experience.

CHAPTER IV
RESEARCH METHODOLOGY

OBJECTIVES

1. A Study on body image satisfaction and psychological wellbeing among young adults.
2. To examine gender difference in body image satisfaction and psychological wellbeing.

HYPOTHESIS

H0- There will be no significant relationship between body image satisfaction and psychological wellbeing.

H1- There will be significant relationship between body image satisfaction and psychological wellbeing

H0- There is no significant difference in body image satisfaction among males and females

H1: There will be significant difference in body image satisfaction among males and females.

H0: There is no significant difference in Psychological Wellbeing among males and females

H1: There will be significant difference in Psychological Wellbeing among males and females.

RESEARCH DESIGN

The present study was executed using Quantitative Cross-sectional Design.

SOURCES OF DATA

The data was collected from a population of adults between 18 to 25 years. The respondents were required to fill out an online questionnaire. The participation in the study was completely voluntary. The respondents consented to participate by filing out a consent statement at the start of the questionnaire.

SAMPLE DESIGN

The sampling method used is convenient sampling is a type of non-probability sampling that involves the sample being drawn from that part of the population that is close to hand.

SAMPLE SIZE

A total of 324 participants completed the questionnaire. These individuals consisted of both males (n=163) and females(n=161). Eligibility required participants to be over the age of 18-25 years.

SAMPLING METHOD

The participants were selected using convenient sampling. Convenient sampling is a type of non-probability sampling method where the sample is taken from a group of people easy to contact or to reach. The sampling method of convenient sampling has been used in the study. The participants selected were within the age group of 18-25. In the present study, the selected participants recommended potential participants, who themselves were observed and asked to nominate others and so on until the sufficient number of participants were obtained.

METHOD OF DATA COLLECTION

The data in the present study has been collected from the population by giving out an online questionnaire through google forms. A consent form was provided at the beginning of the questionnaire to make sure that the confidentiality of the participants data will be maintained. This was followed by a few questions that collected the demographic details of the participants. The body image satisfaction scale was presented followed by the psychological wellbeing scale. The participants took about 10 to 15 minutes to complete the questionnaire and it was ensured that they filled each and every item of the questionnaire. The questionnaire is to be scored according to the scoring guideline given in them and the final results are to be obtained using SPSS.

DRAFTING QUESTIONNAIRE

The cover page included the researcher's personal college contact details, the aims and objectives, requested consent, participation eligibility, while highlighting that participation was to be voluntary, anonymous and confidential. The first page of the questionnaire consisted of demographic questions relating to the participant's age, gender, occupation, Area of residence and level of education. Two scales, Body image satisfaction (Cooper, Taylor & Fairburn,1987) and Psychological Well-being Scale (Ryff, C. D., Almeida, D. M., Ayanian, J. S., Carr, D. S., Cleary, P. D., Coe, C., Williams, D. (2010), were employed.

Data analysis techniques:

The instrument used in this study for data analysis was a statistical package for the social science (SPSS, version 28 for Windows). SPSS, a windows-based program, was used to perform data entry, analysis and to create tables and graphs.

Materials and Instruments:

THE BODY IMAGE SATISFACTION SCALE

The 25-item questionnaire assesses both the subjective appraisal and social-behavioral components of body image. Items were adapted from two different scales; the Body shape questionnaire (Cooper, Taylor, & Fairburn, 1987) and Satisfaction with Appearance Scale (SWAP) (Lawrence et al., 1998). The scale includes 5 factors: facial appearance, appendages appearance, physical appearance, complexion, and body mass index. Each statement was rated on a 7-point Likert scales ranging from strongly disagree to strongly agree.

Scoring And Interpretation:

The scale is scored on 7-point from 1 = strongly disagree to 7 = strongly agree. Negatively worded items are scored in a reversed valence. A higher score on a facet reflects more satisfaction with that aspect of the body.

1= Strongly Disagree, 2= Disagree, 3= Somewhat Disagree, 4= Neither Agree or Disagree, 5= Somewhat Agree, 6=Agree, 7= Strongly Agree

Q2, Q8, Q9, Q10, Q11, Q12, Q13, Q14, Q15, Q17, Q18, Q19, Q20, Q21, Q22, Q23, Q24, and Q25 should be reverse-scored. Reverse-scored items are worded in the opposite direction of what the scale is measuring.

THE PSYCHOLOGICAL WELLBEING SCALE

The psychological wellbeing scale comprises of 18 items, it has six subscales: Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life and Self-acceptance. Each statement is scored on a Likert scale with the values ranging from 1 to 7.

To scoring is done as follows: 1 = strongly agree; 2 = somewhat agree; 3 = a little agree; 4 = neither agree or disagree; 5 = a little disagree; 6 = somewhat disagree; 7 = strongly disagree.

The Autonomy subscale items are Q15, Q17, Q18. The Environmental Mastery subscale items are Q4, Q8, Q9. The Personal Growth subscale items are Q11, Q12, Q14. The Positive Relations with Others subscale items are Q6, Q13, Q16. The Purpose in Life subscale items are Q3, Q7, Q10. The Self-Acceptance subscale items are Q1, Q2, and Q5. Q1, Q2, Q3, Q8, Q9, Q11, Q12, Q13, Q17, and Q18 should be reverse-scored. Reverse-scored items are worded in the opposite direction of what the scale is measuring.

CHAPTER V
DATA ANALYSIS

T-TEST

The t-test is a test in statistics that is used for testing hypotheses regarding the mean of a small sample taken population when the standard deviation of the population is not known.

- The t-test is used to determine if there is a significant difference between the means of two groups.
- The t-test is used for hypothesis testing to determine whether a process has an effect on both samples or if the groups are different from each other.
- Basically, the t-test allows the comparison of the mean of two sets of data and the determination if the two sets are derived from the same population.
- After the null and alternative hypotheses are established, t-test formulas are used to calculate values that are then compared with standard values.
- Based on the comparison, the null hypothesis is either rejected or accepted.
- The T-test is similar to other tests like the z-test and f-test except that t-test is usually performed in cases where the sample size is small ($n \leq 30$).

Types of t-test:

- One sample: Compare the mean of a sample to a predefined value
- Dependent (related) samples: Compare the means of two conditions in which the same (or closely matched) participants participated.
- Independent (unrelated) samples: Compare the means of two groups of participants

Independent t-test

An Independent t-test is a test used for judging the means of two independent groups to determine the statistical evidence to prove that the population means are significantly different. The populations are assumed to differ only in the level of the independent variable.

Thus, any difference found between the sample means should also exist between population means, and any difference between the population means must be due to the difference in the levels of the independent variable.

Based on this information, a curve can be plotted to determine the effect of an independent variable on the dependent variable and vice versa.

CORRELATION

Correlation is a statistical term describing the degree to which two variables move in coordination with one another. A correlation coefficient of 1 means that for every positive increase in one variable, there is a positive increase of a fixed proportion in the other. For example, shoe sizes go up in (almost) perfect correlation with foot length. A correlation coefficient of -1 means that for every positive increase in one variable, there is a negative decrease of a fixed proportion in the other.

There are four types of correlations in statistics;

- Pearson correlation
- Kendall rank correlation
- Spearman correlation
- Point-Biserial correlation.

Pearson r correlation

Correlation between sets of data is a measure of how well they are related. The most common measure of correlation in stats is the Pearson Correlation. The full name is the Pearson Product Moment Correlation (PPMC). It shows the linear relationship between two sets of data. Pearson's correlation used in this study to correlate personality and satisfaction with life and relation between self-esteem and satisfaction with life.

CHAPTER VI

FINDINGS

This study aims to investigate the Body Image satisfaction and Psychological Well-being among young adults. It will also explore whether the gender differences will significantly differ between age categories 18-25 years of age through the use of online questionnaires which have been distributed through online with link.

The sample consists of 324 samples were individuals consisted of both males (n=163) and females(n=161).

Table 1: Mean, SD, and t-value of Male and Female participants on Body Image Satisfaction.

Variable		Males		Females		“t” value
Body Image Satisfaction		Mean	SD	Mean	SD	0.173
		127.66	25.23	122.07	24.78	

Table 1 shows the means, standard deviation and the “t” value of male and female participants. The mean and standard deviation of Body Image Satisfaction of Male participants are 127.66 and 25.23 respectively and that of Female participants are 122.07 and 24.78 respectively. The calculated “t” value is 0.173, which is not statistically significant at 0.05 level.

Body image satisfaction may not vary by gender; this could be due to changes in modern culture, which is gender equal in terms of education and career. Similar findings were also found in the study of Shahi Vivek Kumar (2019).

From the table the result shows that there is no significant difference in Body Image Satisfaction among Male and Female participants.

Table 2: Mean, SD, and t-value of Male and Female participants on Psychological Well Being.

Variable	Males		Females		“t” value
Psychological Well Being	Mean	SD	Mean	SD	.073
	90.88	14.52	87.06	13.12	

Table 2 shows the means, standard deviation and the “t” value in Psychological Well Being of male and female participants. The mean and standard deviation of Body Image Satisfaction of male participants are 90.88 and 14.52 respectively and that of female participants are 87.06 and 13.12 respectively. The calculated “t” value is .073, which is not statistically significant at 0.05 level.

From the table the result shows that there is no significant difference in Body Image Satisfaction among female and male participants. Psychological Well Being may not vary by gender; this could be due to changes in modern culture, which is gender equal in terms of education and career. Similar findings were also found in the study of Shahi Vivek Kumar (2019).

Table 3: Correlation between body image satisfaction and psychological wellbeing

Variable (N=334)	Body image satisfaction
Psychological well being	R=. 663*

***Significant at 0.01 level**

Table 3 shows, that the Pearson correlation coefficient illustrating the significant relationship between Body Image Satisfaction and Psychological Well Being.

A Pearson correlation coefficient was used to test significant correlations between Body Image Satisfaction and Psychological Well Being. A Pearson correlation coefficient found that there is a significant positive relationship between Body Image Satisfaction and Psychological Well Being. Therefore, the Alternative hypothesis is accepted.

CHAPTER VII
RECOMMENDATIONS

The current study suggests that the body image satisfaction and psychological well-being are related. The general topic of body image applications presents many interesting questions and potentially fertile topics for future research in the applied areas of clinical, counselling, educational, and organizational psychology. In each of these fields, further research is needed to investigate the functions of body image. Promotion of psycho-educational interventions in schools by counsellors will be effective in reducing internalization of societal body ideals by helping individuals recognize unrealistic societal body ideals and efforts at decreasing appearance-related distress. Reducing self-defeating “body-talk”, and loosening rigid ideas of an acceptable weight and shape may be effective in achieving improvements in body image. This will result in a variety of benefits, including greater involvement and teamwork, improved social interactions among others, better health, reduced stress, and greater creativity, problem solving, and productivity.

The current study used convenient sampling method to collect data. Future studies must make use of more advanced sampling methods to ensure the validity of the study. The sample size must be large to make sure the findings of study can be accurately applied to the whole population and the effects of other extraneous variables may also be analysed. As the current study used self-report measures for data collection, the data are subject to bias such as social desirability. This study is cross-sectional, thus limits the findings to a particular period of time. Longitudinal studies should be conducted to understand the variation of individuals body image satisfaction and psychological well-being over years as individual’s perception at different stages of life about body image may change. The study may also be conducted on younger and older population. Studies other than correlation method should be used to find the cause-and-effect rather than just the relationship. For comparison studies, the researchers can make sure that the sample taken is proportional. Replication studies should be conducted in order to determine the reliability of the current study. Research should be conducted to assess the theory behind the findings of this study.

CHAPTER VIII

CONCLUSION

The study examined the influence of body image on psychological wellbeing of individuals using a sample of 324 individuals of varied ages. The tests conducted were Pearson's correlation and independent sample t-test. The data for the study was collected through the questionnaire prepared. Findings of the study concludes that, there is a significant positive relationship between body image satisfaction and psychological well-being which implies that the more satisfied one is with his/her body image the more likely it is that he she will experience higher or better psychological wellbeing. Gender differences doesn't exist in body image satisfaction. Thus, from the study it can be concluded that there exists a significant relationship between Body Image Satisfaction and Psychological Well-being among the young adults and there doesn't exist any significant influence in gender.

REFERENCES

- Al-Omar, B. O., & Al-Dghaim, M.D. (2007). *The Structural Model of Emotional Sign of the Psychological Stress*, 144–167.
- Bissell, K. L., & Zhou, P. (2004). Must-see TV or ESPN: Entertainment and sports media exposure and body-image distortion in college women. *Journal of Communication*, 54(1), 5–21. <https://doi.org/10.1111/j.1460-2466.2004.tb02610.x>
- Carroll, A., & Spangler, D. L. (2001). *A comparison of body image satisfaction among Latter-day saint and non ...* Retrieved May 7, 2022, from <https://scholarsarchive.byu.edu/cgi/viewcontent.cgi?article=1432&context=irp>
- Carruthers, C. P., & Hood, C. D. (2004). *The Power of the Positive: Leisure and Well-Being*, 225–245.
- Cash, T. F., & Smolak, L. (2012). *Body image: A handbook of science, practice, and prevention*. Guilford Press.
- Cash, T. F., Cash, D. W., & Butters, J. W. (1983). "Mirror, mirror, on the wall...?". *Personality and Social Psychology Bulletin*, 9(3), 351–358. <https://doi.org/10.1177/0146167283093004>
- Chen, W., & Swalm, R. L. (1998). Chinese and American college students' body-image: Perceived body shape and body affect. *Perceptual and Motor Skills*, 87(2), 395–403. <https://doi.org/10.2466/pms.1998.87.2.395>
- Chrisler, J. C., & Ghiz, L. (1993). Body image issues of older women. *Women & Therapy*, 14(1-2), 67–75. https://doi.org/10.1300/j015v14n01_07
- Cooper, P. J., Taylor, M. J., Cooper, Z., & Fairburn, C. G. (1987). The development and validation of the Body Shape Questionnaire. *International Journal of Eating Disorders*, 6(4), 485–494. [https://doi.org/10.1002/1098-108x\(198707\)6:4<485::aid-eat2260060405>3.0.co;2-o](https://doi.org/10.1002/1098-108x(198707)6:4<485::aid-eat2260060405>3.0.co;2-o)

- Cornwell, C. J., & Schmitt, M. H. (1990). Perceived health status, self-esteem and body image in women with rheumatoid arthritis or systemic lupus erythematosus. *Research in Nursing & Health*, 13(2), 99–107. <https://doi.org/10.1002/nur.4770130206>
- Craig, M. L. (2006). Race, beauty, and the Tangled Knot of a guilty pleasure. *Feminist Theory*, 7(2), 159–177. <https://doi.org/10.1177/1464700106064414>
- Dawson-Andoh, N. A., Gray, J. J., Soto, J. A., & Parker, S. (2011). Body shape and size depictions of African American women in Jet Magazine, 1953–2006. *Body Image*, 8(1), 86–89. <https://doi.org/10.1016/j.bodyim.2010.09.006>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34–43. <https://doi.org/10.1037/0003-066x.55.1.34>
- Dosoqi, M. M. (2006). *Body Image Disorders: Causes, Diagnosis, Prevention and Treatment*.
- Dotse, J. E., & Asumeng, M. (2014). Relationship between body image satisfaction and psychological well-being: The impact of africentric values. *Journal of Social Science Studies*, 2(1), 320. <https://doi.org/10.5296/jsss.v2i1.6843>
- Doğan, T., Sapmaz, F., & Totan, T. (2011). *Adaptation of the Scale of Body Image-Coping Strategies to Turkish: Validity and Reliability Study*, 121–129.
- Duan, W., Guan, Y., & Gan, F. (2016). Brief inventory of thriving. *Chinese Sociological Dialogue*, 1(1), 15–31. <https://doi.org/10.1177/2397200916665230>
- Fairburn, C. G. (2008). *Eating Disorders: The Transdiagnostic View and the Cognitive Behavioural Theory*, 7–22.
- Fredrickson, B. L., & Roberts, T.-A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206. <https://doi.org/10.1111/j.1471-6402.1997.tb00108.x>

- Gluck, M. E., & Geliebter, A. (2002). Racial/ethnic differences in body image and eating behaviours. *Eating Behaviours*, 3(2), 143–151. [https://doi.org/10.1016/s1471-0153\(01\)00052-6](https://doi.org/10.1016/s1471-0153(01)00052-6)
- Grabe, S., & Hyde, J. S. (2006). Ethnicity and body dissatisfaction among women in the United States: A meta-analysis. *Psychological Bulletin*, 132(4), 622–640. <https://doi.org/10.1037/0033-2909.132.4.622>
- Groesz, L. M., Levine, M. P., & Murnen, S. K. (2001). The effect of experimental presentation of thin media images on body satisfaction: A meta-analytic review. *International Journal of Eating Disorders*, 31(1), 1–16. <https://doi.org/10.1002/eat.10005>
- Heinberg, L. J. (1995). Theories of body image disturbance: Perceptual, developmental, and sociocultural factors. *Body Image, Eating Disorders, and Obesity: An Integrative Guide for Assessment and Treatment.*, 27–47. <https://doi.org/10.1037/10502-002>
- Jackman, L. P., Williamson, D. A., Netemeyer, R. G., & Anderson, D. A. (1995). Do weight-preoccupied women misinterpret ambiguous stimuli related to body size? *Cognitive Therapy and Research*, 19(3), 341–355. <https://doi.org/10.1007/bf02230404>
- Koff, E., Benavage, A., & Wong, B. (2001). Body-image attitudes and psychosocial functioning in Euro-American and Asian-American college women. *Psychological Reports*, 88(3), 917–928. <https://doi.org/10.2466/pr0.2001.88.3.917>
- Krueger, D. W. (1989). *Body Self & Psychological Self: A Developmental and Clinical Integration of Disorders of the Self.* .
- Lawrence, J. W., Heinberg, L. J., Roca, R., Munster, A., Spence, R., & Fauerbach, J. A. (1998). Development and validation of the satisfaction with appearance scale: Assessing body image among burn-injured patients. *Psychological Assessment*, 10(1), 64–70. <https://doi.org/10.1037/1040-3590.10.1.64>
- Lin, L., & Reid, K. (2009). The relationship between media exposure and Antifat attitudes: The role of dysfunctional appearance beliefs. *Body Image*, 6(1), 52–55. <https://doi.org/10.1016/j.bodyim.2008.09.001>

- McCabe, M. P., Ricciardelli, L. A., & Banfield, S. (2001). Body image, strategies to change muscles and weight, and puberty. *Eating Behaviours*, 2(2), 129–149.
[https://doi.org/10.1016/s1471-0153\(01\)00025-3](https://doi.org/10.1016/s1471-0153(01)00025-3)
- Miller, L. C., Murphy, R., & Buss, A. H. (1981). Consciousness of body: Private and public. *Journal of Personality and Social Psychology*, 41(2), 397–406.
<https://doi.org/10.1037/0022-3514.41.2.397>
- Pope, H. G., Phillips, K. A., & Olivardia, R. (2002). *The Adonis complex the secret crisis of male body obsession*. Simon & Schuster.
- Pruzinsky, T., & Cash, T. F. (1991). *Body images: Development, deviance, and change*. The Guilford Press.
- Robinson, T. N., Killen, J. D., Litt, I. F., Hammer, L. D., Wilson, D. M., Haydel, K. F., Hayward, C., & Taylor, C. B. (1996). Ethnicity and body dissatisfaction: Are Hispanic and Asian girls at increased risk for eating disorders? *Journal of Adolescent Health*, 19(6), 384–393. [https://doi.org/10.1016/s1054-139x\(96\)00087-0](https://doi.org/10.1016/s1054-139x(96)00087-0)
- Secord, P. F., & Jourard, S. M. (1953). The appraisal of body-cathexis: Body-cathexis and the self. *Journal of Consulting Psychology*, 17(5), 343–347.
<https://doi.org/10.1037/h0060689>
- Shqair, Z. (1999). *The Effectiveness of Cognitive Behavioural Therapy in Treating Bulimia Nervosa among the University Female Students*, 515–557.
- Smolak, L. (2012). Appearance in childhood and adolescence. *Oxford Handbooks Online*.
<https://doi.org/10.1093/oxfordhb/9780199580521.013.0013>
- Spangler, D. L. (2002). Testing the cognitive model of eating disorders: The role of dysfunctional beliefs about appearance. *Behavior Therapy*, 33(1), 87–105.
[https://doi.org/10.1016/s0005-7894\(02\)80007-7](https://doi.org/10.1016/s0005-7894(02)80007-7)
- Sussman, N. M., Truong, N., & Lim, J. (2007). Who experiences “america the beautiful”? Ethnicity moderating the effect of acculturation on body image and risks for eating

- disorders among immigrant women. *International Journal of Intercultural Relations*, 31(1), 29–49. <https://doi.org/10.1016/j.ijintrel.2006.03.003>
- Thomson, L. J., Lockyer, B., Camic, P. M., & Chatterjee, H. J. (2017). Effects of a museum-based social prescription intervention on quantitative measures of psychological wellbeing in older adults. *Perspectives in Public Health*, 138(1), 28–38. <https://doi.org/10.1177/1757913917737563>
- Turnage, B. F. (2005). Influences on adolescent African American females' global self-esteem. *Journal of Ethnic And Cultural Diversity in Social Work*, 13(4), 27–45. https://doi.org/10.1300/j051v13n04_02
- Tylka, T. L. (2012). Positive psychology perspectives on Body Image. *Encyclopedia of Body Image and Human Appearance*, 657–663. <https://doi.org/10.1016/b978-0-12-384925-0.00104-8>
- Watts, K., Cranney, J., & Gleitzman, M. (2008). Automatic evaluation of body-related images. *Body Image*, 5(4), 352–364. <https://doi.org/10.1016/j.bodyim.2008.06.001>
- Williamson, D. A. (1996). Body image disturbance in eating disorders: A form of cognitive bias? *Eating Disorders*, 4(1), 47–58. <https://doi.org/10.1080/10640269608250075>
- Williamson, D. A., Womble, L. G., Zucker, N. L., Reas, D. L., White, M. A., Blouin, D. C., & Greenway, F. (2000). Body image assessment for obesity (BIA-O): Development of a new procedure. *International Journal of Obesity*, 24(10), 1326–1332. <https://doi.org/10.1038/sj.ijo.0801363>

APPENDICES

APPENDIX I:

Socio-Demographic Details

Q1. Name:

Q2. Gender:

Male

Female

Q3. Age:

Q4. Education:

Q5. Occupation:

Q6. Area of residence:

APPENDIX II:

BODY IMAGE SATISFACTION SCALE

Instructions: Please select the number next to each statement to indicate the extent to which you agree or disagree with that statement.

- Strongly Agree
- Somewhat Agree
- A little Agree
- Neither Agree nor Disagree
- A little Disagree
- Somewhat Disagree
- Strongly Disagree

Facial Appearance

I am satisfied with the appearance of my scalp

If I have my way, I could have changed my nose

I admire my eyes when I see them in a mirror

I feel my face look a great deal better than that of the average person

I am satisfied with the appearance of my face

Appendages Appearance

I am satisfied with the appearance of my arms

I am satisfied with the appearance of my legs

I am worried about other people seeing rolls of flesh around my waist or stomach

I feel that my limbs are disproportionate to my body

Physical Appearance

I feel that my height is unattractive to others

Generally, I feel obnoxious about my physical structure

I have felt discriminated because of my physical appearance

I worry about my body not being good enough

I am concerned my body is not muscular or strong enough

I have felt that it is not fair that other people are thinner than me

Complexion

I satisfied with the shade of my skin colour

I sometimes feel like changing my complexion

When I compare my skin colour to others I "come up short"

I think in my society others do not see my skin colour as beautiful

It is better to have a lighter skin than dark skin

Body Mass Index

I have noticed the shape of other people and felt that my own shape compared unfavourably

I always feel I should be lighter than I am now

I have been particularly self-conscious about my shape and weight when in the company of other people

I have felt excessively large and rounded

If I gain weight, I get anxious and depressed

PSYCHOLOGICAL WELLBEING SCALE

Instructions: Please select the number next to each statement to indicate the extent to which you agree or disagree with that statement.

- Strongly Agree
- Somewhat Agree
- A little Agree
- Neither Agree nor Disagree
- A little Disagree
- Somewhat Disagree
- Strongly Disagree

1. "I like most parts of my personality."
2. "When I look at the story of my life, I am pleased with how things have turned out so far."
3. "Some people wander aimlessly through life, but I am not one of them."
4. "The demands of everyday life often get me down."
5. "In many ways I feel disappointed about my achievements in life."
6. "Maintaining close relationships has been difficult and frustrating for me."
7. "I live life one day at a time and don't really think about the future."
8. "In general, I feel I am in charge of the situation in which I live."
9. "I am good at managing the responsibilities of daily life."
10. "I sometimes feel as if I've done all there is to do in life."
11. "For me, life has been a continuous process of learning, changing, and growth."
12. "I think it is important to have new experiences that challenge how I think about myself and the world."

13. "People would describe me as a giving person, willing to share my time with others."
14. "I gave up trying to make big improvements or changes in my life a long time ago"
15. "I tend to be influenced by people with strong opinions"
16. "I have not experienced many warm and trusting relationships with others."
17. "I have confidence in my own opinions, even if they are different from the way most other people think."
18. "I judge myself by what I think is important, not by the values of what others think is important."

PROJECT REPORT
THE RELATIONSHIP BETWEEN PERFECTIONISM AND ADJUSTMENT IN
ADULTS

Submitted by:

RUTH ABRAHAM

ANUDHARSHA MANOJ

NIALA GAFOOR

Register No: SB19PSY032

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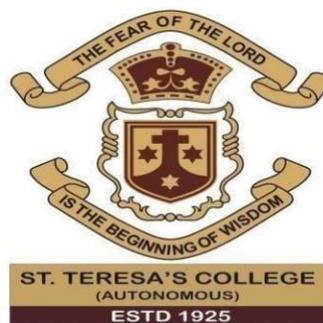
SB19PSY041

Under the guidance of

MS. ANN JOSEPH

In partial fulfillment of the requirement for award of the degree of

B.Sc. PSYCHOLOGY



PROJECT REPORT

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM

Nationally Re-accredited at 'A++' level (4th cycle) Affiliated to: Mahatma Gandhi University

MARCH 2022

CERTIFICATE

This is to certify that the project report entitled, “THE RELATIONSHIP BETWEEN PERFECTIONISM AND ADJUSTMENT IN ADULTS”, is a bonafide record submitted by MS.RUTH ABRAHAM Reg no.SB19PSY032, MS.ANUDHARSHA.MANOJ Reg no.SB19PSY041, MS.NIALA GAFOOR, Reg.no. SB19PSY027, in partial fulfillment of the requirements for the award of the Degree of Bachelor of Psychology during the academic year 2019-2022.



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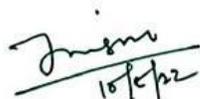
Ms. ANN JOSEPH

Assistant Professor

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External Examiner:



DECLARATION

We Anudharsha ,Niala Gafoor, Ruth Abraham hereby declare that the study presented in the dissertation entitled, “The Relationship between Perfectionism and Adjustment in adults”, which is submitted to the Department of Psychology, St. Teresa’s College, Ernakulam is a bonafide record of the research work carried out by me, under the supervision and guidance of Ms.Ann Joseph, Assistant Professor, Department of Psychology, St. Teresa’s College, Ernakulam, in partial fulfillment of the requirements for the degree of Bachelor of Science in Psychology and has not previously formed the basis for the award of any degree, diploma, fellowship, title or recognition before.

Place: Ernakulam

Ruth Abraham
Anudharsha. Manoj
Niala Gafoor

Date:

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Above all, I thank God Almighty for blessing me in all the stages of the project and for helping me complete the project successfully.

Thanking You

Ruth

Abraham

Anudharsha

Manoj

Niala

Gafoor

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ABSTRACT

Introduction: A perfectionist is someone who has a personality that strives for flawlessness. This is often accomplished through fixating on imperfections, trying to control situations, working hard, or being critical of the self or others. Perfectionism is a tendency to set up excessively high standards for yourself and/or others. In psychology, adjustment is the condition of a person who is able to adapt to changes in their physical, occupational, and social environment. It is defined as the behavioural process by which human beings and other organisms maintain equilibrium between various interpersonal and intrapersonal needs as well as their needs and the obstacles of the environments they belong to.

Methodology: This study was conducted among 300 participants who were undergraduates, postgraduates and even working people. The data was collected using convenience sampling through survey method with the help of Google forms.

Result: Perfectionism showed a negative correlation with Adjustment. According to the results, it can be noted that there is a significant relationship between Perfectionism and Adjustment. This was predicted using regression analysis, which also proved the same.

Conclusion: The study implies that as the level of Perfectionism increases, a person's adjustment level tend to decrease. A person finds it difficult to cope up with changes and step out of their comfort zones. A perfectionist hence suffers from deep pain, guilt and immense self- expectations. Perfectionism is associated with a variety of psychosocial adjustment problems like greater loneliness, shyness, and fear of negative evaluation, and lower levels of self-esteem.

Individuals suffer from self-doubt and discouragement when things do not go their way.

Keywords: *Perfectionism, Adjustment, Undergraduates, Post graduates, working people, Adults*

CHAPTER 1
INTRODUCTION

1.1. Background of the study:

According to the American Psychological Association, Perfectionism is the tendency to demand of others or of oneself an extremely high or even flawless level of performance, in excess of what is required by the situation. There are people in this world who always seem to strive for perfection. A Perfectionist is someone who has extremely high standards for their works, strives for success and tends to complete tasks on time. The person believes that there is no room for mistakes and everything should be perfect and flawless. They plan things the way they believe it should be in a very structured manner. They are very confident in whatever they do. They are achievement oriented and are hard working. Since the early 1990s, Paul Hewitt and Gordon L. Flett, professors of Psychology at York University in Toronto were of the idea that perfectionism comes in different forms, each associated with different kinds of problems. Some of those problems may be less severe than others but no form of perfectionism is completely problem free. Other researchers however suggested that some forms of perfectionism - particularly those that involve high personal standards - can be adapted. They also found that both adaptive and maladaptive perfectionists have personal standards, but failing to meet those standards is more stressful for the latter than for the former (Benson, 2003).

Most of us have heard as children that "practice makes man perfect," a familiar phrase with two meanings. On the one hand, the term may serve as a motivator for endurance, implying that if we work hard enough, we may finally fulfil our objectives and attain success. However, it indicates that perfection is an achievable state of being, and that something is wrong with us if our performance remains faulty despite extensive effort.

The academic literature reflects this binary view of perfectionism by discussing both the benefit and drawbacks of striving for perfection. While being a perfectionist can help you succeed, it can also harm your mental health, according to most experts. Indeed, academics continue to debate whether perfectionism can ever be categorised as a positive trait or whether it is always a negative one. Studies have discovered correlations between perfectionism and specific psychopathologies, highlighting the significance of further research into the construct.

The 'Adjustment as an achievement' model focuses on adjustment at a specific point in time,

taking into account an individual's adjustment to one challenge rather than all challenges they have faced. Adjusting to one scenario can be independent of struggling to adapt to another method. An example of this approach would be observing a poor student beginning to study during recess because they do not have a home environment to learn effectively. Starting to learn at a different time would be considered adequately adjusting to this scenario(Mohinuddin, 2021).

The 'adjustment as a process' theory portrays that, since the moment we are born, humans are in a constant state of adjustment. Since we exist in a state of constant, oftentimes rapid change, it follows that we cannot break these changes down into separate, unrelated challenges. This method of consideration asserts there is no way to 'adjust successfully', because something will always be about to change and prompt further adjustment. This approach views all life events as inextricable from some form of adjustment.(Wikipedia,2022)

Successful adjustment is also called being 'well adjusted' and is critical to mental health. Colloquially, being well-adjusted is defined as a person who "is reasonable and has good judgement...their behavior is not difficult or strange." It is important to remember that adjustment is a continuum, not a simple dichotomy; people can fluctuate and be adept at adjusting in different circumstances. In general, a person that is well-adjusted will have the following characteristics:

- An understanding of personal strengths and weaknesses and a tendency to play up strengths while limiting the appearance of weaknesses
- Personal respect and appreciation, a well-adjusted individual finds themselves to be inherently valuable
- Appropriate aspirations that require hard work and capitalizing on strengths without being too far out of reach and setting them up for failure
- Basic needs such as food, water, shelter, and sleep are consistently met, as well as a general feeling of security and positive self-esteem
- Positive attitude and a tendency to find the goodness in other people, objects and activities. A well-adjusted person will acknowledge others' weaknesses but not actively search for faults.
- Flexibility to respond to and accommodate for changes in the environment
- Ability to handle adverse circumstances: well-adjusted people are able to take negative life

events in stride, they will be motivated to take action to remedy the problem rather than passively accept it

- A realistic perception of the world that allows for a healthy amount of distrust of others and encourages pragmatic thinking
- A feeling of ease within surrounding environments. (Wikipedia,2022)

^ A well-adjusted person feels comfortable in different aspects of their community such as home, school, work, neighborhood, religious organization, etc. A balanced life philosophy that accounts for and acknowledges the impact that the world has on an individual, as well as the impact an individual can have on the world (Mangal, S. K.2002).

When perfectionism is healthy or adaptive it can be self-motivating and help the person to overcome adversity and achieve success. On the other hand, when it is unhealthy or maladaptive, that is, when the person becomes overly concerned with “perfect” work, when nothing becomes good enough, it can lead to unhappiness. They tend to avoid taking tasks for fear of making an error or not being able to complete it. They find it difficult to accept failure. This could adversely affect their physical as well as their mental health. Anxiety, depression, and suicidal ideation are only some of the mental health problems that specialists have repeatedly linked with this form of perfectionism (Sandoiu, 2018). Some studies have found that high blood pressure is more prevalent among perfectionistic people, and other researchers have even linked the trait with cardiovascular disease. The need to be perfect can also make a student struggle with fatigue, insomnia and chronic headaches, all of which can negatively impact a child’s ability to learn.

A person who is a perfectionist sometimes tends to find it difficult to adapt or adjust to anything that is out of his/her comfort zones.

1.2. Problem statement

The study aims to examine the relationship between Perfectionism and adjustment in adults and to assess the association between the Perfectionism.

1.3. Need and significance of the study:

The purpose of this research was to shed light on the paradoxical relationships between perfectionism and adjustment. It was proposed that the positive relationship between perfectionism and adjustment for one's studies triggers positive affect. Conversely, it is proposed

that obsessive passion for studies, prescribed perfectionism with adjustment. Furthermore, Studies revealed that the positive effects of perfectionism are due to striving for perfection, a facet of perfectionism. In contrast, the negative relationship between perfectionism and adjustment is due to the importance of being perfect. Results provide insights on the role of perfectionism in adjustment and yield implications for the field of psychology.

The concept of perfectionism represents an important individual-difference variable that has received considerable attention. Perfectionism is now seen as being multidimensional in nature. The need of the study is to identify the relationship between perfectionism and adjustment among adults , how perfectionism affects a person's mental health and to study perfectionism in persons academic performance etc .

Perfectionism can make you feel unhappy with your life. It can lead to depression, anxiety, eating disorders, and self-harm. Eventually, it can also lead you to stop trying to succeed. Even mild cases can interfere with your quality of life, affecting your personal relationships, education, or work. Perfectionism can affect young people as well as adults. Children and teenagers are often driven to be overachievers in their schoolwork as well as activities such as sports, clubs, community service, and jobs. This can lead to an obsession with success.

Ultimately, it can interfere with the ability to achieve it. Perfectionism's cause isn't always clear. It's often a learned behaviour. People with perfectionism believe that they're valuable only because of what they achieve or what they do for other people. Academic settings can bring out perfectionism in young people.(Flett, G.L., Hewitt, P.L, 2002).

Meanwhile, adjustment is the condition of a person who is able to adapt to changes in their physical, occupational, and social environment. In other words, adjustment refers to the behavioural process of balancing conflicting needs, or needs challenged by obstacles in the environment. Humans and animals regularly adjust to their environment. Successful adjustment is also called being 'well adjusted' and is critical to mental health. Colloquially, being well-adjusted is defined as a person who "is reasonable and has good judgement...their behaviour is not difficult or strange. "It is important to remember that adjustment is a continuum, not a simple dichotomy; people can fluctuate and be adept at adjusting in different circumstances (Wikipedia, 2022).

Perfectionism is often seen as a positive trait that increases your chances of success, but it can lead to self-defeating thoughts or behavior's that make it harder to achieve goals. It may also cause stress, anxiety, depression, and other mental health issues. People who strive for perfection out of feelings of inadequacy or failure may find it helpful to speak with a therapist; this can often help people manage excessive self-criticism. It is typically viewed as a positive trait rather than a flaw. People may use the term "healthy perfectionism" to describe or justify perfectionistic behaviour (Curran, Thomas, Hill, Andrew. P, 2019).

Perfectionists always wanted to produce flawless work. They also have higher levels of motivation and conscientiousness than non-perfectionists. They set inflexible and excessively high standards. They hold an all-or-nothing mindset about their performance. Studies have also found that perfectionists have higher levels of stress, burnout, and anxiety (Swider,Harari,Breidenthal & Steed, 2018). Research has identified two distinct but related sub-dimensions of perfectionism. The first, which we call excellence-seeking perfectionism, involves tendencies to fixate on and demand excessively high standards. Excellence-seeking perfectionists not only stringently evaluate their own performance but also hold high performance expectations for other people in their lives. The second, which we call failure-avoiding perfectionism, involves an obsessive concern with and aversion to failing to reach high performance standards. Failure-avoiding perfectionists are constantly worried their work is not quite right or good enough and believe that they will lose respect from others if they do not achieve perfection. The "beneficial" effects of perfectionism were stronger for those higher in excellence-seeking perfectionism than those who exhibit more failure-avoiding perfectionistic tendencies. On the flip side, the "detrimental" effects of perfectionism were stronger for those higher in failure-avoiding perfectionism, but were usually still present for people higher in excellence-seeking perfectionism (Swider, Harari,Breidenthal & Steed , 2018).

1.4. Scope of the study:

People with perfectionism hold themselves to impossibly high standards. They think what they do is never good enough. Some people mistakenly believe that perfectionism is a healthy motivator, but that's not the case. Perfectionism can make you feel unhappy with your life. It can lead to depression, anxiety, eating disorders, and self-harm. Eventually, it can also lead you to stop trying to succeed. Even mild cases can interfere with your quality of life, affecting your

personal relationships, education, or work. Perfectionism can affect young people as well as adults. Children and teenagers are often driven to be overachievers in their schoolwork as well as activities such as sports, clubs, community service, and jobs. This can lead to an obsession with success. Ultimately, it can interfere with the ability to achieve it. Perfectionism's cause isn't always clear. It's often a learned behaviour. People with perfectionism believe that they're valuable only because of what they achieve or what they do for other people. Academic settings can bring out perfectionism in young people. Meanwhile, adjustment is that condition of a person who is able to adapt to changes in their physical, occupational, and social environment. In other words, adjustment refers to the behavioural process of balancing conflicting needs, or needs challenged by obstacles in the environment. Humans and animals regularly adjust to their environment. For e.g; when they are stimulated by their physiological state to seek food, they eat (if possible) to reduce their hunger and thus adjust to their hunger stimulus. Adjustment disorder occurs when there is an inability to make a normal adjustment to some need or stress in the environment. High prescribed perfectionism was associated with a variety of adjustment problems, including greater loneliness, shyness, fear of negative evaluation, and lower level of self- esteem.

1.5. Objectives of the study:

- 1) To study the role of Perfectionism on Adjustment.
- 2) To assess the association between the Perfectionism and Adjustment.

1.6. Limitations of the study:

The study under consideration is not free of limitations. Many restrictions have been encountered in this study, which may have hampered its ability to fully solve the problem statement. Due to time restrictions, the research was held back in terms of quality. There are certain limitations to the study under consideration. The sample collection was shown to be confined to only a few districts in Kerala. In a short period of time, getting enough samples for data collection proved problematic. Among the samples, most of them were females (n= 251) who were students between the ages 18-22. There were a smaller number of samples who were males (n=48) and above the age of 22.

CHAPTER 2

LITERATURE REVIEW

A study on Perfectionism in Adolescence, associated with gender, age and socio-economic status was conducted in Norway. The sample consisted of 10,217 adolescents aged 16–19 years (52.9% girls). The levels of perfectionism were relatively similar between the genders in the present study, besides slightly higher Socially Prescribed Perfectionism (SPP) among girls than boys. There were also significantly more girls than boys among the high scorers on overall perfectionism, Self-oriented Perfectionism (SOP), and SPP, respectively. High perfectionism was related to Socio-Economic Status for perceived economic well-being, but not for parental education level. Implications for further research and clinical interventions were suggested (Sand, Boe, Saharan, Stormark and Hysing, 2021). The study on Perfectionism is increasing over time: a meta-analysis of Birth Cohort differences from 1989 to 2016 was conducted by Thomas Curran and Andrew Hill. It was the first study to compare perfectionism across generations, which found significant increases among more recent undergraduates in the US, UK and Canada. In other words, the average college student last year was much more likely to have perfectionistic tendencies than a student in the 1990s or early 2000s. They speculated that this may be because, generally, American, Canadian, and British cultures have become more individualistic, materialistic, and socially antagonistic over this period, with young people now facing more competitive environments, more unrealistic expectations, and more anxious and controlling parents than generations before. Their analyses are based on 164 samples and 41,641 American, Canadian, and British college students, who completed the Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) between 1989 and 2016. (Curran and Hill, 2019). A study on Perfectionism and Mental Health was conducted by Shiva Garenmayepour and Mohammed Ali Besharat. The aim of it was to examine the relationship between perfectionism and mental health in a sample of students. 185 students (92 girls, 85 boys, 8 unknown) were included in this study. All participants completed the Farsi version of the Positive and Negative Perfectionism Scale (FPANPS; Besharat, 2009) and the Mental Health Inventory (MHI; Besharat, 2006). Positive perfectionism was positively associated with psychological well-being and negatively associated with psychological distress. The results also revealed that negative perfectionism was negatively associated with psychological well-being and positively associated with psychological distress (Garenmayepour and Besharat, 2010). Perfectionism is a personality disposition related to individual differences in performance in sport, school, and other areas of

life where performance, tests, and competition play a major role. A study conducted on Perfectionism and Performance by Joachim Stoeber discusses the importance of differentiating two main dimensions of perfectionism—perfectionistic strivings and perfectionistic concerns—when examining the relationships between perfectionism and performance in sport, academics, music competitions, aptitude tests, and laboratory tasks. In contrast, the studies do not show that perfectionistic concerns are consistently negatively associated with performance. There is little evidence suggesting that perfectionistic strivings are detrimental to performance. On the contrary, across different domains and different indicators of performance, the evidence suggests that perfectionistic strivings are associated with higher performance and predict higher performance beyond what is expected from individuals' general aptitude or previous performance level. Perfectionistic strivings appear to have a motivational quality that gives individuals an extra “boost” to do their best, make an additional effort, and achieve the best possible results. Even some clinical psychologists are beginning to recognize that there is nothing unhealthy or maladaptive about perfectionistic strivings as such (Stoeber, J. 2012). A study was conducted on Perfectionism as a predictor of subsequent adjustment: Evidence for a specific diathesis–stress mechanism among college students. The relations among perfectionism, stress, subsequent psychological symptoms, and hopelessness were examined among 215 college students. Hierarchical regression analyses were conducted to determine whether dimensions of perfectionism (P. Hewitt & G. Flett, 1991) predicted psychological symptoms and hopelessness (1 month later), and the extent to which stress scores added incremental validity to these predictions. Results indicated that socially prescribed perfectionism was a significant predictor of both adjustment measures. In addition, stress accounted for a significant amount of additional variance in predicting adjustment beyond perfectionism. Consistent with a diathesis–stress model, a significant Perfectionism \times Stress interaction was found in predicting scores on adjustment measures beyond perfectionism and stress. However, this interaction was only found for socially prescribed perfectionism. Results provide support for a specific diathesis–stress mechanism and important implications for developing specific interventions in working with perfectionistic college students. (Chang & Rand, 2000). Another study was conducted on Perfectionism and Psychological Adjustment among College Students: Does Educational Context Matter? by David R. Hibbard and Kyra L. Davies. This study examined perfectionism and psychological adjustment among students in two educational contexts. One hundred-twenty-five students from a selective private university and 106 students from a larger public university completed measures of perfectionism and adjustment. Private university students were more perfectionistic than public university students on several perfectionism dimensions, but

associations between perfectionism and adjustment were broadly similar in both contexts. (Hibbard and Davies, 2000). Gordon L. Flett, Paul L. Hewitt and Tessa De Rosa conducted a study on Dimensions of perfectionism, psychosocial adjustment, and social skills. The present study sought to extend past research by determining the association between the three dimensions of perfectionism (self-oriented perfectionism, other-oriented perfectionism and socially-prescribed perfectionism) and measures of perceived social skills and psychosocial adjustment. A sample of 105 students completed the Multidimensional Perfectionism Scale along with multiple measures of psychosocial adjustment and perceived social skills. As expected, the correlational results demonstrated that high socially prescribed perfectionism was associated with a variety of psychosocial adjustment problems, including greater loneliness, shyness, and fear of negative evaluation, and lower levels of social self-esteem. In addition, socially prescribed perfectionists had lower self-perceived social skills. There were few significant findings involving self-oriented or other-oriented perfectionism. Taken together, these findings suggest that socially prescribed perfectionists are prone to suffer from various psychosocial problems and perceived deficits in social skills. (Flett, Hewitt and De Rosa, 1996). Abeer Saleh Alshehri conducted a study on the impact of perfectionism trait on anxiety and academic procrastination among international Saudi Arabian students studying in United States Universities. The aim of the study is to investigate the relationship of perfectionist personality traits to anxiety traits and academic procrastination. It is also done to examine the possibility of predicting trait anxiety and academic procrastination by measuring perfectionist personality traits. The sample consisted of 521 Saudi students studying in United States universities during the 2017-2018 academic year. The Student participants were invited to complete an electronic survey that included the Multidimensional Perfectionism Scale, State-Trait Anxiety Inventory - Form Y and Tuckman Procrastination Scale. The results of the study showed a significant positive linear relationship among trait anxiety with the three perfectionism dimensions: socially- prescribed perfectionism, self-oriented perfectionism, and other-oriented perfectionism. The findings also revealed a significant positive correlation between self-oriented perfectionism and academic procrastination. The study is the first of its kind to investigate the perfectionist trait and its relationship to academic procrastination and anxiety among Saudi students studying in the US. (Alshehri, 2020). Goran Livazović and Karla Kuzmanović conducted a study on Predicting adolescent perfectionism: The role of socio-demographic traits, personal relationships, and media. The aim of the study was to investigate the relation between perfectionism; the quality of family, peer, and college relationships; and media usage and content interests. The sample

included 203 students (134 female, 66%) aged 18-25 years, enrolled at the University of Osijek in Croatia. A hierarchical regression analysis was implemented with the aim of establishing significant perfectionism predictors. The results show that Age and gender were significant predictors of perfectionism. Participants with lower family relationship quality reported higher parental expectations and complaining as well as significantly higher doubts in personal performance and concern about mistakes. Similarly, a lower peer relationship quality predicted doubts in personal performance and stronger concerns about mistakes. The quality of college relationships positively predicted higher perfectionist personal standards and organisation. General life satisfaction predicted higher concerns about mistakes, while current situational life satisfaction predicted higher levels of perfectionist organisation. Media usage intensity had no significant effect. Adolescent interest in information-educational media predicted higher personal standards as well as concern about mistakes and organisation. Higher interests in entertainment media content predicted more concern about mistakes, while interest in negative media content negatively predicted organisation in adolescents. Socio-demographic traits, relationships with family, peers and colleagues, as well as life satisfaction and media content interests represent significant adolescent perfectionism predictors, explaining 14%-28% of individual perfectionism dimensions.(Livazović.G, Kuzmanović.K, 2020).

CHAPTER 3
THEORETICAL FRAMEWORK

PERFECTIONISM

Perfectionism is a tendency to set up excessively high standards for yourself and /or others. Like any personality trait, perfectionism includes a whole spectrum of characteristics, some positive and negative, that varies from person to person.

The literature focuses on two types of perfectionism: self-oriented and socially prescribed perfectionism. Perfectionism can be defined as excessively high standards for the performance of the self or others .Perfectionism can be maladaptive and has been associated with increased depression, stress, anxiety, eating disorder and suicide risk.

A comprehensive understanding of the factors that contribute to perfectionism may help design programs to prevent negative outcomes such as depression and stress.

Perfectionism can be classified as adaptive or maladaptive. Perfectionism is considered to be adaptive if it is solely a desire to achieve. However, it is maladaptive if the individual is also overwhelmed with concern over meeting his or her high standards. Adaptive perfectionists are satisfied when their goals are met and can accept their mistakes.

The following factors contribute to Perfectionism:

Parental perfectionism

Parental perfectionism has increases the likelihood of child perfectionism but this association differs among self-oriented and socially prescribed perfectionists .Self oriented perfectionist reported having a parent of same gender who was a perfectionist .Although the perfectionist parent held high expectations for his or her own performance, he or she did not have the same expectations for performance of his or her own child.

Parenting style

Parenting style also contribute to perfectionism .Students who have close relationship with parents who were authoritative and supportive parents have realistic and flexible rules and were willing to communicate with children about those rules.Socially prescribed perfectionists who describe parents as more authoritarian and supportive Parents also have realistic and flexible

rules and were willing to communicate with children of those rules .Socially prescribed perfectionists described parents as more authoritarian .

Personality

Personality has also been implicated in the development of perfectionism (Hill,MCIntire and Bacharach 1997)Several studies have examined perfectionism using big five frameworks which consist of the personality traits of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.(Costa and McCrae,1992)

Academic achievement

Personal academic history also affects perfectionism. Neumeister's (2004) study, which examined gifted students with a history of academic successes, found that self – oriented and socially-prescribed perfectionists described early achievement as a key factor in their current perfectionism.

Genetics

In addition to previously described research on family influence, two twin studies have examined the genetic components of perfectionism. Tozzi and colleagues (2004) study of adult female twins in the USA found that identical twins are more likely to share perfectionism than fraternal twins.

ADJUSTMENT

The concept of adjustment was initially a biological one and was a cornerstone in Darwin's theory of evolution (1859). In Biology, the term usually employed was an adaptation. Darwin maintained that only those organisms most fitted to adapt to the hazards of the physical world survive. Biologists have continued to be concerned with the problem of biological adaptations, and much of human illness is based on transformation to the stress of life.

Adjustment, in psychology, the behavioural process by which humans and other animals maintain an equilibrium among their various needs or between their needs and the obstacles of their environments. A sequence of adjustment begins when a need is felt and ends when it is satisfied. Hungry people, for example, are stimulated by their physiological state to seek food.

When they eat, they reduce the stimulating condition that impelled them to activity, and they are thereby adjusted to this particular need.

Social and cultural adjustments are similar to physiological adjustments. People strive to be comfortable in their surroundings and to have their psychological needs (such as love or affirmation) met through the social networks they inhabit. When needs arise, especially in new or changed surroundings, they impel interpersonal activity meant to satisfy those needs. In this way, people increase their familiarity and comfort with their environments, and they come to expect that their needs will be met in the future through their social networks. Ongoing difficulties in social and cultural adjustment may be accompanied by anxiety or depression. It then explores the seven theories of adjustment: stage models, Somatic-psychology, the disability centrality model, ecological models, recurrent or integrated model, transactional model of coping, and chaos theory.

CHAPTER 4

RESEARCH METHODOLOGY

4.1. Objective of the study:

- 1) To study the role of Perfectionism on Adjustment.
- 2) To assess the association between the Perfectionism and Adjustment.

4.2. Hypothesis:

1) There is a negative relationship between Perfectionism and Adjustment.

2) Perfectionism has a significant role in Adjustment

4.3. Research**design:**

The researcher used correlational method to study the relationship between Perfectionism and Adjustment. A correlational research design investigates relationships between variables without the researcher controlling or manipulating any of them. It reflects the strength the relationship between Perfectionism and Adjustment. A correlation reflects the strength and/or direction of the relationship between two (or more) variables. The direction of a correlation can be either positive or negative. Correlational research is ideal for gathering data quickly from natural settings.

4.4. Source of**data:**

Data was collected from undergraduates, postgraduates and even working people.

4.5. Sampling**design:**

This is a non-probability sampling.

4.6. Sample size:

The present study is based on a sample that consisted of 300 participants between the age of 18 to 40. The participants include undergraduates,

postgraduates and even working people.

There were more female participants (251) than male participants (48).

4.7. Sampling

method:

Convenience sampling is used here. It simply includes the individuals who happen to be most accessible to the researcher. This is an easy and inexpensive way to gather initial data.

4.8. Method of

data collection:

The data was collected using Google forms. The information that is collected can be automatically entered into spreadsheets.

4.9. Drafting

questionnaire:

The form consisted of four parts.

- The first part is informed consent. The subject is given the brief idea about the questionnaire and their consent was taken.
- The second part is socio-demographic sheet. It was developed by the researcher to collect data such as Name, Age, Occupation, Gender.
- Frost Multidimensional Perfectionism Scale (FMPS)

The Frost Multidimensional Perfectionism Scale (FMPS) is a 35 question self-report measure with four subscales of perfectionism: Concern over mistakes and doubts about actions, Excessive concern with parents' expectations and evaluation, Excessively high personal standards, Concern with precision, order and organization. This scale can be useful in formulating the underlying causes of a client's presenting concerns. The FMPS is appropriate for people 15 years and older. This scale can be useful in highlighting that perfectionism is in fact unhelpful, and provides clinicians and clients useful benchmarks regarding what "normal" levels of perfectionism are. The Frost Multidimensional Perfectionism Scale was developed by Dr.

Randy Frost and colleagues in 1990 and originally measured six subscales. Subsequent evaluation using principal components analysis found that four subscales were more appropriate.

Stoeber (1998) validated the scale using 243 university student participants with an average age of 26 years. The validity of the scale has been widely established through convergence with other clinically significant problems, including anxiety in college students, insomnia, social phobia, obsessive-compulsive symptoms and anorexia nervosa. Perfectionism has been shown to be an underlying trait in many of these presentations.

- Weinberger adjustment inventory (WAI)

The Weinberger Adjustment Inventory (WAI) includes 10 subscales plus a short validity scale within an 84-item inventory. The inventory is designed to measure long-term functioning rather than short-term symptoms. It has been validated for use with both clinical and non-clinical populations. The exact same items can be used across a wide range of ages (children, parents, grandparents) as long as the individuals read at or above approximately the fourth-grade level.. There also is a 37-item short-form (WAI-SF) that takes adults about 5 minutes and children about 15. The two primary dimensions are distress (anxiety, depression, low self-esteem, low well-being) and self-restraint (impulse control, suppression of aggression, consideration of others, responsibility). The four subscales within both distress and restraint (i.e., selfrestraint) can also be used separately to assess the particular construct of interest (e.g., anxiety). In addition, there are two defensiveness scales: denial of distress, which refers to defensiveness about normative experience of distress, and repressive defensiveness, which refers to claims of nearly absolute restraint. Although these two scales correlate moderately, they are not composite. Two different short-forms have been used in research, both with 12-item distress and restraint subscales but varying in terms of which defensiveness subscale is included. In addition to use of the scales in correlational analyses, a six-group WAI typology of adjustment styles (Weinberger & Schwart (1990) has been validated crossing Distress.

4.10. Data analysis technique:

- Demographic details were analyzed using frequency, percentage and mean
- Kolmogorov-Smirnova test for normality
- Spearman rank correlation test
- Regression analysis
The data collected from the questionnaire was analyzed using software named IBM SPSS Statistics.

CHAPTER 5
DATA ANALYSIS

The study was conducted among 300 participants who were undergraduates, postgraduates and even working people. The objectives of the present study are (1) To study the role of Perfectionism on Adjustment and (2) To assess the association between the Perfectionism and Adjustment. To meet the objectives of the study, the following hypotheses have been put forward: (1) There is a negative relationship between Perfectionism and Adjustment, and (2) Perfectionism has a significant role in Adjustment.

Figure 1

Distribution of participants based on gender

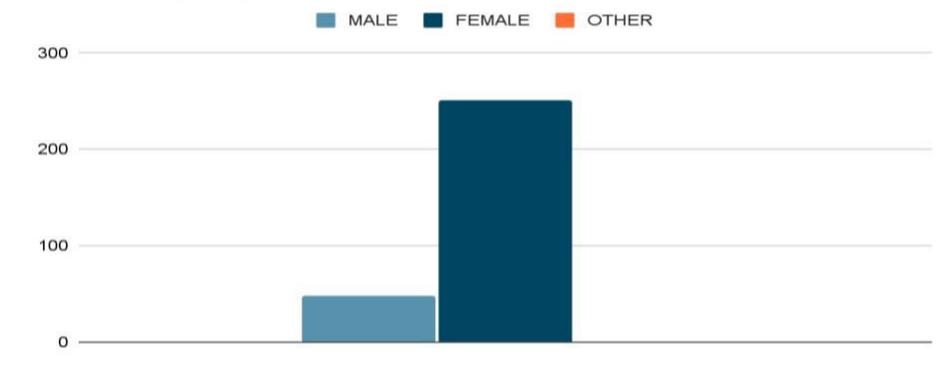


Figure 1 shows the distribution of participants in the study based on Gender, there were 48 male, 251 female and 1 other participants in this study.

Figure 2

Distribution of participants based on age

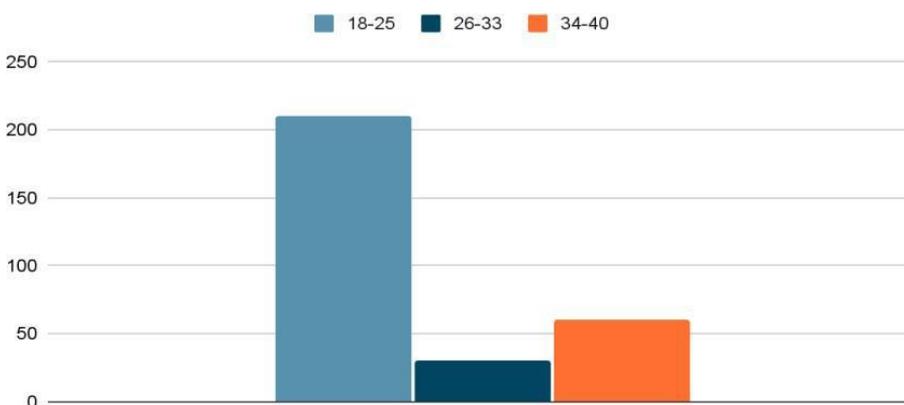


Figure 2 shows the distribution of participants in the study based on their age. In this study, 210 participants were under the age group 18-25, 30 participants were under the age group 26-33 and 60 participants were under the age group 34-40.

Table 1

Reliability of instruments obtained on the sample.

Sl.No.	Instruments	N	Cronbach's α
1	Frost Multidimensional Perfectionism Scale- Brief	300	0.608
2	Weinburger Adjustment Inventory- Short form	300	0.398

This table shows the reliability of the instruments using Cronbach's α and number of values in the Population (N). Since α of Perfectionism scale is greater than 0.5, the scale is reliable for this population. Since α of Adjustment is less than 0.5, the scale is not reliable for this population.

Table 2 *Result of Kolmogorov- Smirnova test of normality of Perfectionism and Adjustment*

	Statistic	df	Sig.
Perfectionism	.048	300	.089
Adjustment	.060	300	.011

The Kolmogorov- Smirnov Test for Normality pointed out that the significance level of both Perfectionism and Adjustment is less than 0.05 and hence it is not normally distributed. The results are given below:

There is a negative relationship between Perfectionism and Adjustment

Table 3

Summary of Spearman Rank Correlation between Perfectionism and Adjustment in adults.

Variable	Adjustment
Perfectionism	-.168**

**p < 0.01

The above table examines the relationship between Perfectionism and adjustment. With reference to the table, it can be noted that there exists significant negative relationship between Perfectionism and Adjustment, since the p-value is less than 0.01. Hence the hypothesis, there is a negative relationship between Perfectionism and adjustment, is accepted.

The study implies that as the level of Perfectionism increases, a person's adjustment level tend to decrease. A person finds it difficult to cope up with changes and step out of their comfort zones. A perfectionist hence suffers from deep pain, guilt and immense self-expectations.

Table 4

Regression analysis predicting the significant role of Perfectionism on Adjustment

Variable	R ₂	Adjusted R ₂	df	F	B	T	Sig
Perfectionism	0.35	0.32	299	10.849	-4.31	-3.294	0.001

The above table predicts the relationship between Perfectionism and Adjustment. With reference to the table it can be noted that Perfectionism predicts adjustment. Since the regression coefficient is positive, it shows that Perfectionism plays a significant role in Adjustment. Hence the hypothesis is accepted.

Perfectionism is associated with a variety of psychosocial adjustment problems like greater loneliness, shyness, and fear of negative evaluation, and lower levels of self-esteem.

Individuals suffer from self-doubt and discouragement when things do not go their way.
Perfectionists have higher levels of stress, burnout and anxiety.

CHAPTER 6

FINDINGS

Major Findings:

1. There is a negative relationship between Perfectionism and Adjustment among adults.
2. Perfectionism has a significant role in Adjustment.

Perfectionism showed a negative correlation with Adjustment. According to the results, it can be noted that there is a significant relationship between Perfectionism and Adjustment. This was predicted using regression analysis, which also proved the same.

The study implies that as the level of Perfectionism increases, a person's adjustment level tend to decrease. A person finds it difficult to cope up with changes and step out of their comfort zones. A perfectionist hence suffers from deep pain, guilt and immense self-expectations. Perfectionisms associated with a variety of psychosocial adjustment problems like greater loneliness, shyness, and fear of negative evaluation, and lower levels of self-esteem. Individuals suffer from self- doubt and discouragement when things do not go their way. Perfectionists have higher levels of stress, burnout and anxiety.

With reference to the Spearman rank Correlation table, it can be noted that there exists significant negative relationship between Perfectionism and Adjustment, since the p-value is less than 0.01. Hence the hypothesis, there is a negative relationship between Perfectionism and adjustment, is accepted.

With reference to Regression analysis table it can be noted that Perfectionism predicts adjustment. Since the regression coefficient is positive, it shows that Perfectionism plays a significant role in Adjustment. Hence the hypothesis is accepted.

CHAPTER 7

RECOMMENDATIONS

Many restrictions have been encountered in this study, which may have hampered its ability to fully solve the problem statement. Due to time restrictions, the research was held back in terms of quality. There is scope for further research as the dimensions that were present in both

Perfectionism and Adjustment scale weren't taken into consideration. This research can be done by focusing on different socio-demographic details such as age groups, gender, education level etc.

CHAPTER 8
CONCLUSION

The purpose of this study was to look at the relationship between perfectionism and adjustment in adults. The research was carried out using Google form settings, and the data gathered can be automatically loaded into spreadsheets. The goal of the research was to study the role of Perfectionism on Adjustment and to assess the association between the Perfectionism and Adjustment. Perfectionism was the independent variable while Adjustment was the dependent variable. The present study was conducted on 300 participants who were undergraduates, Postgraduates and even working people. Among the sample there were 251 females, 48 males and 1 other participants. Most of the participants were between ages 18-25 (n=210). 30 participants were between the ages 26-33, and 60 were between the ages 34-40. Perfectionism was assessed using Frost Multidimensional Perfectionism Scale- Brief. Adjustment was assessed using Weinburger Adjustment Inventory- Short Form. Data analysis was done using a software called IBMSPSS Statistics. Kolmogorov-Smirnova test for normality, Spearman rank correlation test, and Regression analysis were the tests done for the same. According to the results, it can be noted that there is a significant relationship between Perfectionism and Adjustment. The study implies that as the level of Perfectionism increases, a person's adjustment level tends to decrease. A person finds it difficult to cope up with changes and step out of their comfort zones. A perfectionist hence suffers from deep pain, guilt and immense self-expectations. Perfectionism is associated with a variety of psychosocial adjustment problems like greater loneliness, shyness, and fear of negative evaluation, and lower levels of self-esteem. Individuals suffer from self-doubt and discouragement when things do not go their way.

References

- Adjustment*. (n.d). Retrieved from Britannica.com
- Adjustment(Psychology)*. (2021, December 31). Retrieved from Wikipedia.
- Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences*.
- Brian Swider (2018, December 27). The Pros and Cons of Perfectionism, According to Research . Harvard Business Review.
- Edward C.Chang, Natalie J.Lin, Abbey J.Herringshaw, Lawrence J.Sanna, Cathryn G.Fabian, Marisa J.Perera, Victoria V.Marchenko. (2011, February 17). Understanding the link between perfectionism and adjustment in college students: Examining the role of maximizing. *Personality and Individual Differences*.
- Frost Multidimensional Perfectionism Scale (FMPS)*. (n.d). Retrieved from novopsych.com
- Gluch, V. (2018, April 4). View of Factors Influencing the Development of Perfectionism.Factors Influencing Development of *Perfectionism*.
- Gordon L.Fletta, Paul L.Hewitt , Tessa De Rosac. (1996, February). Personality and individual differences. *Dimensions of Perfectionism, Psychosocial Adjustment, and Social Skills*.
- Hewitt, P. L. & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*.
- Hewitt, P. L., Mittelstaedt, W. M., & Flett, G. L. (1990). Self-oriented perfectionism and generalized performance importance in depression. *Individual Psychology*.Hibbard, D.R. (2014, June 2). Perfectionism and Psychological Adjustment among College Students: Does Educational Context Matter? *Perfectionism and Psychological Adjustment*.
- Lippman., B.L. (1990). Perfectionism. *Problematizing Perfectionism: A Closer look at the perfectionism construct*.
- Mohinuddin, M. (2021, January 8). Adjustment in Psychology. SWeduCareBD.Richard Pallardy (2005). adjustment | psychology. Encyclopedia Britannica.
- Sand, L. (2021). Perfectionism in Adolescence: Associations With Gender, Age, and Socioeconomic Status in a Norwegian Sample. *Frontiers*.
- Sandoiu, A. (2018, October 12). *How Perfectionism affects your (mental) health*. RetrievedFrom medicalnewstoday.com

- Scott, E. (2022, January 5). *10 Signs you maybe a perfectionist*. Retrieved from
Verywellmind.com
- Ward, Colleen; Kennedy, Antony (1994-06-01). *Psychological adjustment*. International Journal
of Intercultural Relations. 18 (3): 329–343.
- Wilding, M. (2021, September 14). *3 Types of Perfectionism to watchout for*. Retrieved from
Psychologytoday.com
- Weinberger Adjustment Inventory (WAI)*. (2012, July). Retrieved from
selfdefiningmemories.com
- Wikipedia contributors. (2022, April 21). Perfectionism (psychology). Wikipedia.

APPENDICES

APPENDIX A
Informed Consent

We are Niala Gafoor, Ruth Abraham and Anudarsha Manoj, final year students pursuing BSc Psychology at St. Teresa's College (Autonomous), Ernakulam. As part of our curriculum, we are conducting a study on the relationship between Perfectionism and Adjustment among adults. If you wish to participate we request you to fill this survey as honestly as possible. All information collected will be kept strictly confidential and only the researcher and the supervisor will have access to it. By clicking "I agree" below, you are indicating that you have freely consented to participate in this research study. The data obtained would be kept strictly confidential and used solely for research purposes

- Agree

Socio-demographic sheet

Name:

Age:

Gender:

Education:

Occupation:

FROST MULTIDIMENSIONAL PERFECTIONISM SCALE- BRIEF

ITEMS	Strongly disagree	Disagree	Unsure/Neutral	Agree	Strongly agree
1. If I fail at work/school, I am a failure as a person.					
2. I set higher goals for myself than most people.					
3. If someone does a task at work/school better than me, then I feel like I failed at the whole task.					
4. I have extremely high goals.					
5. Other people seem to accept lower standards from themselves than I do					
6. If I do not do well all the time, people will not respect me					
7. I Expect higher performance in my daily tasks					

than most people do.					
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8. The fewer mistakes I make, the more people will like me.					
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WEINBURGER ADJUSTMENT INVENTORY-SHORT FORM

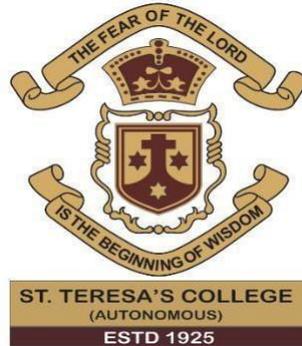
Part 1	TRUE	SOMEWHAT TRUE	NOT SURE	SOMEWHAT FALSE	FALSE
1.I usually think of myself as a happy person					
2.There have been times when I said I would do one thing but did something else					
3.I really don't like myself much					
4.I can remember a time when I was so angry at someone that I felt like hurting them.					
5.Once in a while, I don't do something that someone else asked me to.					
6.There have been times when I didn't let people know about something I did wrong.					
7.I'm not very sure of myself.					
8.I never act like I know more about something than I really do					
9.I am answering these questions truthfully					
10. Once in a while, I say bad things about people that I would not say in front of them.					
11. People who get me angry better watch out.					

12. I have done some things that weren't right and felt sorry about it later.	
13. I worry too much about things that aren't important.	
14. Once in a while, I break a promise I've made	
15. I'm the kind of person who has a lot of fun	
16. There have been times when I did not	

finish something because I spent too much time "goofing around"	
17. I am never unkind to people I don't like	
18. Everyone makes mistakes at least once in a while.	
19. I often feel sad or unhappy.	
20. Once in a while, I say things that are not completely true.	
21. I usually feel I'm the kind of person I want to be.	
Part 2	
22. I do things without giving them enough thought	
23. when I have the chance, I take things I want that don't really belong to me	
24. if someone tries to hurt me, I make sure I get even with them.	
25. I feel nervous or afraid that things won't work out the way I would like them to	
26. I become "wild and crazy" and do things other people might not like	
27. I feel lonely	
28. Before I do something, I think about how it will affect the people around me\	

29. I will cheat on something if I know no one will find out	
30. when I am doing something for fun (for eg. Partying, acting silly)I tend to get carried away and go too far	
31. I do things that I know really aren't right. \	
32. I get into such a bad mood that I just feel like sitting around and doing nothing.	
33. I lose my temper and "let people have it" when I'm angry	
34. In recent years, I've felt more nervous or worried about things that	
I have needed to.	
35. I feel very happy	
36. I think about other people's feelings before I do something they might not like	
37. I make sure that doing what I want will not cause problems for other people	

CULTURAL CREED: AN ESSENCE OF IMBALANCE



Project submitted to St. Teresa's College (Autonomous) in partial fulfilment of the requirement for the degree of BACHELOR OF ARTS in English Language and Literature

By

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March 2022

DECLARATION

I hereby declare that this project entitled “Cultural Creed: An Essence of Imbalance” is the record of bona fide work done by me under the guidance and supervision of Dr. Jeena Ann Joseph, Assistant Professor, Department of English.

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March 2022

Ernakulam

CERTIFICATE

I hereby declare that this project entitled “Cultural Creed: An Essence of Imbalance” by Ruth Miriam Guezelar is a record of bona fide work carried out by her under my supervision and guidance.

Dr. Jeena Ann Joseph

Department of English

Ernakulam

St Teresa’s College (Autonomous)

March 2022

Ernakulam

**An Abstract of the Project entitled
Cultural Creed: An Essence of Imbalance**

By

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BA English Language and Literature

St Teresa's College (Autonomous)

Ernakulam

Register Number: AB19ENG019 (2019-22)

March 2022

Supervising Teacher: Dr. Jeena Ann Joseph

In certain quarters cultural transmission is referred to as socialization rather than transmission. This study highlights the criminal justice system in the United States of America during the 1980s using the cultural transmission theory to explain why the American judicial system has gotten so difficult.

The major purpose of this study is to decode the book *Just Mercy* and demonstrate the concept of cultural transmission and explain all of the challenges that exist in the criminal justice system. The author and attorney, Bryan Stevenson discusses his journey as an attorney for the condemned on the death row. He speaks of many of the cases he has taken on the people he has represented. One among those was the case of Walter McMillian. He was condemned to death row before he was even convicted of the crime. Mr. Stevenson spends so much time advocating for Walters innocence, until one day he is finally released from the death row.

This study offers considerably more, investigating through this and numerous comparative cases, the genuine issues of the American equity framework. In the following chapters after introduction, the story takes us through the long term battle of an optimistic and skilled youthful attorney against the United States of America's overall set of laws- a framework actually leaning towards the rich and the strong over the poor and the defenseless.

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Ruth Miriam Guezelar

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Introduction

Many flaws can be identified in the criminal justice system in the country of the United States of America. This study deals with the different aspects as well as references taken up from the book *Just Mercy*-written by author and attorney Bryan Stevenson. The work becomes a point of reference to thoroughly understand the different aspects of the criminal justice system.

The theoretical framework used for this study is cultural transmission theory. The cultural transmission theory can also be described as socialization. It can be further defined as behavior that is learned from the society or culture usually surrounding a person. These behaviors can further be of type like pro social behavior or anti social behavior. One of the examples of the cultural transmission theory can be there are many celebrations of different types of holidays and lifestyle habits which can be further passed from one generation to another, or between generations or with friends and so on. Same like that the different types of behaviors can also be easily culturally transmitted from a person's childhood to adulthood and so on. Now, if the theory of cultural transmission is further viewed from the social science perspective, and then cultural transmission defined as a form or way of learning information in a way in just one direction. Based on the background of this study the criminological paper version of the cultural transmission theory can be defined or called cultural deviance theory.

The main scope of this study is to properly decode the book as a reference, depict the cultural transmission theory, and further explain all of the aspects present in the faulty criminal justice system present in the country of the United States of America. This study will give a thorough view on the same as well as show the changes or the developments that have been made over the years in the system, the people who were affected, and the other aspects like history, case, scenarios etc.

The objective of this study is to describe or explain the faulty judicial system present in the

country of the United States of America, with the use of cultural transmission theory. To explain further the reference has been adopted from the book *Just Mercy* written by author and attorney Bryan Stevenson

The first chapter deals with the theory of cultural transmission and socialization. Certain individuals may turn to crime not on account of any innate character traits, but because they are influenced by many factors. It also talks about cultural deviance where deviance is required in any society because it is what adjusts the way of life, furthermore changing certain societies or cultures. This lays the foundation for the understanding of the criminal justice system.

The second chapter throws light on the many allusions drawn from the book *Just Mercy* written by Bryan Stevenson. The issues of the American equity framework are investigated through the numerous cases dealt by Stevenson, an attorney for the condemned on the death row, especially the Walter McMillian case. It also talks about racial profiling and police mistreatment and brutality along with the racial prejudice inherent in the system.

Chapter three views the work of Bryan Stevenson in the light of cultural transmission theory. It examines the impacts of cultural transmission on social structure. This chapter also shows how cultural transmission helps Stevenson to challenge racial discrimination and fight for justice.

Chapter 1: Impacts of cultural transmission on social structure

Humans learn from other humans in a wide variety of domains. Consequently, systems of knowledge and behavior are culturally transmitted in human populations.

Cultural transmission is a strategy for learning new information through interactions with others and their societies.

Culture represents a collection of attitudes, values, beliefs and behavioral scripts that are generally agreed upon by a group of individuals.

It can incorporate everything from language, marriage practices, and administrative setups, to meaning of family, greeting behaviors, lodging constructions and demise ceremonies to give some examples.

A primary role of culture is to provide a steady and stable environment or system whose objective is to guarantee or, at any rate, improve the survival of the group.

At its broadest level, culture addresses mainstream inclinations, however there can be 'culture within a culture' by which more smaller segments of the population that is the subcultures.

Cultural transmission facilitates the spread of behaviors within social groups and may lead to the establishment of stable traditions in both human and non-human animals.

Socialization can be characterized as the process by which individuals figure out how to become individuals from the general public.

Thus, the socialization process of an individual starts from birth and continues throughout life. The period of socialization helps an individual to develop feelings, perceptions, learn the basics of social interaction and also learn to recognize and respond socially to parents and other important people in their lives.

The most intense periods of socialization are in childhood and adolescence but reinforcement and adjustment continue through life. Through the interaction with others, infants gradually become aware of themselves as individuals. It's through socialization that people acquire their culture, their

specific skills and abilities and knowledge of what kinds of people they are.

Socialization sustains culture so consequently people are impacted by socialization and culture without a doubt.

Through cooperation with others, newborn children step by step become mindful of themselves as people. It's through socialization that individuals secure their way of life, their particular abilities and capacities and information on what sorts of individuals they are. Social interaction does not come naturally. Our behavior is shaped by the culture we reside in. However, we are born into our culture, which means we must follow what our surrounding environment tells us to do and how to act. Our behavior is greatly influenced by the environment we are surrounded by throughout childhood. For instance, a child growing up in a bad environment involving cigarettes, drugs, and alcohol may be more likely to think these actions are “good” and start them at a younger age. Whereas a child growing up in a good environment surrounded by hard working parents, dinner with the family every night and chores may most likely have stronger values and succeed in the long run.

Culture consists of a set of principles and traditions, which is passed on from one generation to another. Socialization teaches cultural values and norms, which provides the guidelines for our everyday life. It is therefore inevitable that socialization influences what we do as humans. Respectable individuals socialize their children as per mainstream values. They believe that working hard and maintaining a law-abiding lifestyle earn success. Parents in respectable families rely on strict methods of discipline to socialize their children according to mainstream values. Aware of the hazardous social environment they occupy, respectable guardians establish curfews and watch out for their children's activities.

As opposed to respected families, street families are more devoted to the oppositional orientation embodied in the code. Their interpretations of their reality as well as their interpersonal behaviors firmly follow to its standards. Their orientation approximates that held by youth in the subculture envisioned by some strain-based accounts. The clusters of values by which street folks abide are antithetical to the values of middle-class, conventional existence. Street families place less emphasis on

work and education, which is underpinned by their profound doubt in the proper construction in general. Most are financially impaired; whatever income they earn is abused, spent on other priorities, such as cigarettes and alcohol.

For youth reared in street families, their unfavorable early life experiences and the inept, aggressive socialization they receive culminates to shape their strong proclivity toward an orientation consistent with the street code. The cultural standards to which decent and street families adhere are diametric opposites. Because both groups are immersed in the same contextual environment, their orientations are prone to clash, although the aggressive posture of the street orientation generally prevails. Due to the present situation, decent folks have a motivating force to turn out to be personally acquainted with the behavioral imperatives of the code; moreover, they must be prepared to immediately perform them.

With every new role, new challenges and adaptations to new behaviors are expected to function in society properly. Thus beginning the socialization process each time. Family is the most important agent for socialization. At the school, children are gaining knowledge and skills to function in society.

By the first half of the 20th century, the study of deviance was situated in a vibrant intellectual environment, setting the stage for the development of what are now regarded as core theories of criminology.

Cultural Deviance Theory states that crime is correlated strongly to the cultural values and norms prevalent in a society.

In other words, individuals may turn to crime not on account of any innate character traits, but because they are influenced by the place they live in, the people they are surrounded by and the socio-economic conditions of their microenvironment. These three elements come together to form a unique subculture impacting the individual and their chances to turn to crime.

Deviance is the recognized violation of cultural norms". Deviance is required in any society because it is what adjusts the way of life, furthermore changing certain societies or cultures. If someone is deviant, they are going against what is socially adequate.

The theory states that the individual is not responsible for their deviance as much as the community within which they reside. The place, people, and social structure of the community in which they reside influence people.

The causes of criminal behavior in metropolitan regions are not about the poverty suffered in those areas but the product of a distinct lower-class culture whose focal concern is deviance against the norms of society.

Cultural deviance theories have their origins in the conflict perspective, which views conflict as a normal condition of society. Those in power in order to maintain their rights, interests, and dominance create laws. This would imply that all laws have political motives. Cultural deviance theory is supposedly evidenced by the existence of subcultures within lower class groups.

The lower class culture has its own set of goals and values, and that these differ from those of other groups.

Conformity to the specific goals and values of the under class may even result in a transmission of criminal behavior from one generation to the next.

Chapter two briefly clarifies the many qualities and allusions drawn from Bryan Stevenson's book *Just Mercy* which he wrote as an author and lawyer. This book is a valuable resource for anybody interested in gaining a better understanding of the criminal justice system.

Cultural transmission may be seen as a single-minded pursuit of new knowledge. In light of this study cultural deviance may be seen as a criminalization of the transmission theory.

Chapter 2: Overview of the book *Just Mercy*

In the novel *Just Mercy* by Bryan Stevenson, Mr. Stevenson discusses his journey as an attorney for the condemned on the death row. He speaks of many of the cases he has taken on and the people he has represented. One story he focuses on in particular is his case representing Walter McMillian. This man was condemned to death row before he was even convicted of the crime. Mr. Stevenson spends so much time advocating for Walters' innocence, until one day he is finally released from the death row. Notwithstanding, McMillian's story is absolutely its backbone; *Just Mercy* offers considerably more, investigating through this and numerous comparative cases, the genuine issues of the American equity framework. It is, as it were, a one of a kind story about growing up after the long term battle of an optimistic and skilled youthful attorney against the united states overall set of laws- a framework still well established in inclinations bias, actually leaning toward the rich and the strong over poor people and the defenseless.

Today a prominent lawyer, Stevenson was brought into the world to an oppressed African American family in a poor, provisional, racially isolated settlement on the eastern shore of the Delmarva Peninsula. Although this was somewhat the greater part a century prior, it was Delaware, so Stevenson needed to manage prejudice all through his whole youth.

Just Mercy opens with Bryan Stevenson going to visit Henry, his first death row inmate. Bryan clarifies how he became passionate with regards to criminal guard regulation and protecting death row inmates after his internship with the Southern Center for Human Rights in the Deep South. Stevenson examines how he discovered that the American legal framework was worked to rebuff helpless residents more seriously than the rich. The story goes to the instance of Walter McMillian, an individual of colour who was improperly indicted for killing a white lady and in this manner condemned to death row. In examining Walter's case, Stevenson clarifies how the racial predisposition and assumption of culpability that prompted Walter's conviction is straightforwardly connected to a background marked by isolation and servitude in the Deep South. Stevenson establishes the charitable

Equal Justice Initiative and takes on McMillian's case to overturn his sentence.

After six years waiting for capital punishment, Walter McMillian is excused and liberated. Stevenson and Walter stayed close after the case shut. Life in general was very troubled for Walter, the injury of waiting for capital punishment stays with Walter who suffered from dementia and definite corruption.

The book's last chapter portrays Stevenson conveying a commendation at Walters's burial service. He clarifies the amount he had gained from working with Walter, who showed him the significance of trust in defeating treachery.

With the news that the Supreme Court has governed in the Equal Justice Initiative's approval, Stevenson discovers that his expectation and strength have prompted substantial advances for improvement in law enforcement. Having settled mass imprisonment rates, the equal justice initiative proceeds with its civil rights work through drives to develop public comprehension of mass detainment as a component of a long history of racial foul play in America.

One of the most remarkable voices calling to change the resultant system of mass imprisonment is the activist attorney Bryan Stevenson. *Just Mercy, a story* of justice and redemption which is based on his experience battling for justice inside the system for more than 30 years, Stevenson effectively dispersed his call to action in several public discussions. Recounting his own deep-rooted experiences working as a back attorney within the criminal justice system. His appeal isn't simply to legal counselors or to reformers or to specific groups, his allure is about as broad as they get.

In the context of Bryan Stevenson's call to action, Stevenson argues that the degree of disgrace in the criminal justice system is long standing that each of us students, lawyers, educators and every citizen has a role to play over our regular daily existence in turning the possibility of lack of interest and mercilessness that feed mass inequity and imprisonment. For Stevenson, trust is what gives an individual the courage to believe in oneself and their specific understanding of the world. It might not make any sense from a strictly practical point of view to decline to be an observer to injustice, standing up isn't in every case simple, but as noted regarding ethnography, it is vital. Stevenson's originations of hope are reflected in the conscious strategies utilized by criminologists working within cultural or

convict paradigms.

All through each case we see how a good proportion of the men condemned were specifically chosen because of race and vulnerability. Poverty is a vital element for vulnerability in *Just Mercy* and is likewise a great issue for African Americans in the south during that time. According to Bryan Stevenson the opposite of poverty is not wealth, the opposite of poverty is justice. This statement means black people are being treated poorly and that not even all the money in the world could defeat the fulfillment they would get for having opportunity and reasonableness. This is easily shown in the beginning of *Just Mercy* through racial profiling, police brutality or abuse.

Racial profiling refers to the discriminatory practices of law enforcement officials for targeting individuals for suspicion of crime based on the individual's race, ethnicity or religion. Although the local official didn't segregate off of a religion they separated off of racial ethnicity. Being black dominantly implied you were risky and a danger to society. For instance Walter McMillian was an African American who was blamed for killing a white woman named Rolanda. All of the Walters family knew that he could never kill her since he was an extremely focused man. The only evidence that the police had on Walter was that he was an African American man who was involved in an interracial affair, which meant he was reckless and potentially dangerous. Simply being black and having interracial illicit relationship was adequate enough proof for them to believe fake story and convict Mr. McMillian, which is not just. These events show how it's a battle for African Americans to fit into society and having anybody thinking they are dangerous or threatening which is the reason they would much rather have the feeling of freedom and equal representation than monetary satisfaction.

Notwithstanding racial profiling Bryan Stevenson shows how police mistreatment and police brutality occurs in his book. Police mistreatment is yet an overall issue influencing predominantly black prisoners mentally and physically. Police mistreating prisoners is one example of abuse and shown with Bryan's first client named Henry. Bryan first came into the southern prisoners defensive council as an intern and was asked to visit this man named Henry. He was supposed to tell him only about his execution date being pushed back but once Bryan gave him the news he was extremely blissful which

amazed him. After hours of talking the guard came angrily and he roughly shackled Henry's lower leg since they exceeded the time limit.

A significant number of these abused prisoners were poor and coloured. Being a coloured man living in poverty would be a tough life. Not having equivalent freedom is not just and it is for this reason something contrary to poverty is not wealth but justice.

Chapter 3: Cultural transmission in the works of Bryan Stevenson

Cultural transmission is an important aspect of learning new information about cultures and values through interactions with people from different communities. Cultural transmission of behavior and knowledge is essential for the human population to ensure a stabilized community and facilitate the establishment of stable traditions. In this study, the cultural transmission in the work of Bryan Stevenson will be reviewed in the context of the theory of cultural transmission.

The novel *Just Mercy* by Bryan Stevenson discusses the author's journey as the attorney for the condemned of death row. Although several cases were discussed in the novel, one particular case of Walter McMillian was highlighted as the author spent much time with him until the day he was released from death row. The author remarks this long journey as the long-term battle of a skilled, youthful and optimistic attorney fighting against the issues of the American equity framework. The case continues of Walter, a person of colour is rather intriguing in the context of cultural transmission, as he was wrongfully indicted with the murder of a white woman. The context of cultural transmission arises with the association of Mr. Stevenson with Walter and how Mr. Stevenson was able to overturn the racial predisposition that made the legal framework assume Walter of culpability. The theory of cultural transmission relates to socialization were the spread of behaviors between the social groups support living in harmony. This also relates to the social responsibility of the groups to determine accountability and discard racial predisposition for one another, which is evident in the novel of Stevenson

One of the main aspects of cultural transmission understands between the individuals and the mindset of accepting other cultural beliefs and values, which is noted among the personality characteristics of Mr. Stevenson. The particular traits of sympathy and understanding can be regarded as two of the key factors, which helped Mr. Stevenson accept the culture of Walter allowing him to give preference to other cultures over the predominant discriminatory ideas.

In addition to this, the field of Mr. Stevenson, that is, criminology has witnessed a trending regard to

culture for the adaptation of the social structure. This results in behaviors being considered endogenous to the social structure and culture, which has grown to be a part of the racial foul play in America. Stevenson truly believed in the aspect of trust in terms of a factor that gives the individuals courage to believe in the specific understanding of the world, highlighting the true form of effective cultural transmission. The field of cultural criminology further helps in better understanding how crime and its control work can result in social consequences in the form of collective interpretation and representation of a particular community. This field considers far more data variables than just the crime data. It includes information on the public performance of justice, public display of joy or anger, media representation of victimization or crime and offensive subculture practices. This connects to another issue of police brutality based on racial profiling. Recent trends have shown a large number of cases where the men were condemned based on their vulnerability and race. This is somehow correlated to the cultural deviance theory, which states the crime is strongly correlated to societies cultural norms and values. This results in individuals getting influenced to commit a crime not just based on their innate character traits but also because of their environment in which they live, the people around them and the socioeconomic conditions. These three factors form a subculture, which has grater influence over the individuals to turn to crime.

However in the case of Walter and the case management by Mr. Stevenson, it is noted that the perception of such subculture is predominantly surfaced in the law system also resulting in racial profiling where certain communities such as black men are treated poorly and misjudged for their actions. The discriminatory practice of law enforcement officials is a good example of poor cultural transmission capabilities among the top tier professionals. Racial profiling results in unjustified suspicion of a crime, which is completely based on a religion or race ethnicity of the individual. For instance, being black individual predominantly implies that the person is a threat and danger to society, without evidence of criminal actions. The barrier in cultural transmission has resulted in people from different races or religions assuming individuals from certain communities to be criminally interpreted. Their true values and beliefs are being overshadowed by the creative discriminatory perceptions drawn

by the people outside of their community.

The theory of cultural deviance states that conflict is a normal part of society. Only the people in power create laws to maintain their dominance, interests and rights, thus hinting at political motives behind all such major laws and regulations. From a different viewpoint cultural transmission can transfer mindset and thoughts between different generations or even people from different communities. Hence for instance white people who target black individuals and racially discriminate against them may pass on these cultural attributes to others influencing others to think in the same way.

From the above discussion it was noted how cultural transmission could have positive and negative impacts on the construction of the social structure. The novel by Bryan Stevenson presents crucial insights and examples on the importance of cultural transmission and how it helped him to connect with the condemned men on death row and fight for their justice when convicted wrongfully. The particular focus on police brutality based on the racial profile is a major example of how the gap in communication between two communities can result in discriminatory thoughts among them, resulting in broader implications. For instance, a black man condemned for the crime just because he is black, with the thought that he is a threat and danger to society.

Conclusion

It is evident that culture depicts the gathering of outlook, values, principles, and behavioral scripts, which are generally agreed on, by a group of people. Moreover, the discussion in the core chapters conclude that culture plays a crucial role in providing a continuous and stable environment or system whose goal is to confirm, or refine the existence of the group. It is found to be considered as the approach for learning novel information via collaborations with others and their society. Furthermore, it can be inferred that the socialization procedure of an individual initiates from birth and endures through lifetime. It has been found that the time of socialization assists a person to establish feelings, presumptions, acquire the basics of societal interaction and also to identify and react socially to parents and other significant individuals in their life. It also infers that it is via socialization that people protect their way of life, their specific competencies and information on what types of individuals they are. The discussion also concludes that socialization and culture are associated with each other since socialization educates cultural norms and values that offer the principle for routine life. Besides, it is found that reputable people believed that functioning hard and preserving a peaceful lifestyle earned accomplishment. The parents in the family are found to depend on tough techniques of discipline to socialize their kids as per the conventional values. It also compares the culture and socialization of street families with respectable families. It was found that the street families, in relation to respectable families, are more committed to the oppositional orientation embodied in the code. It was found that most of such families are financially impaired whatsoever income they earned is neglected, consumed on other priorities like alcohol and cigarettes. It is also explored in the study of cultural deviance and cultural transmission. The theory of deviance that asserted that the individual is not accountable for their deviation as much as the community within which exists in. Furthermore, the cultural deviation is found to be a single minded hunt of novel knowledge and appears as a crimination of the transmission theory.

The cultural transmission in the major area of Bryan Stevenson was reviewed in this study.

There were numerous cases, which were discussed in the novel depicting the theory of cultural

transmission and related areas. It was found that the theory of cultural transmission is deemed to be related with socialization wherein the distribution of behaviors between the social groups advocates living in harmony. It too associates the social liability of the groups to determine responsibility and discard racial predisposition for one another that is obvious in the novel. It was inferred that the two attributes named as sympathy and understanding were found to be helpful for Stevenson to adapt to the culture of Walter, which further enabled him to provide preference to other cultures over the major biased notions. It is found that the areas of cultural criminology assisted in superiorly understanding how crime and its control work can lead to social outcomes in the form of collective interpretation and representation of a specific community. It contained certain cases where the men were convicted based on their vulnerability and race. It is found to be correlated with the cultural deviation theory that asserted that the crime is robustly related with the societies cultural standards and values. It contributed to individuals getting impacted to commit a crime not only based on their inborn attributes but also due to the environment in which they live, the individuals around them and the socio economic situations.

It was found that the barrier in cultural transmission has led the individuals from diverse religions or racism supposing people from some communities to be illegally understood. Their real values and beliefs are being overshadowed by the creative discriminatory perceptions drawn by the individuals outside of their community. It was found that the black people are being treated pitifully and not even all the money in the globe might defeat the desires they would get for having opportunity and sensibleness. In a nutshell, it can be concluded that cultural transmission might have both positive as well as negative influence on the building of social structure

Works Cited

Tindall, B. Allan. "Theory in the Study of Cultural Transmission." *Annual Review of Anthropology*, vol. 5, no. 1, Oct. 1976, pp. 195–208. DOI.org (*Crossref*), <https://doi.org/10.1146/annurev.an.05.100176.001211>.

Truskanov, Noa, and Yosef Prat. "Cultural Transmission in an Ever-Changing World: Trial-and-Error Copying May Be More Robust than Precise Imitation." *Philosophical Transactions of the Royal Society B: Biological Sciences*, vol. 373, no. 1743, Apr. 2018, p. 20170050. *royalsocietypublishing.org* (*Atypon*), <https://doi.org/10.1098/rstb.2017.0050>.

Cultural Transmission - an Overview | ScienceDirect Topics.
<https://www.sciencedirect.com/topics/social-sciences/cultural-transmission>.

Cultural Transmission Theory - Cultural Transmission Theory Symbolic Interaction Perspective I. All Behavior Is Learned Therefore Deviant Behavior Is | Course Hero.
<https://www.coursehero.com/file/19792072/Cultural-Transmission-Theory/>.

Bisin, Alberto, and Thierry Verdier. *The Economics of Cultural Transmission and Socialization*. Working Paper, 16512, National Bureau of Economic Research, Nov. 2010. *National Bureau of Economic Research*, <https://doi.org/10.3386/w16512>.

Culture and Transmission of Culture Socialization | Studymode.
<https://www.studymode.com/essays/Culture-And-Transmission-Of-Culture-Socialization-43710094.html>.

Criminal Justice System Research Papers / WOW Essays. 23 Dec. 2019,

<https://www.wowessays.com/free-samples/criminal-justice-system-research-paper-example/>

Cultural Differences Between Deviance And Crime - 621 Words / Studymode.

<https://www.studymode.com/essays/Cultural-Differences-Between-Deviance-And-Crime-86028700.html>.

Cultural Transmission Theory of Deviance - Simply Psychology.

<https://www.simplypsychology.org/cultural-transmission-theory.html>.

Matsueda, Ross L. “‘Cultural Deviance Theory’:: The Remarkable Persistence of a Flawed Term.” *Theoretical Criminology*, vol. 1, no. 4, Nov. 1997, pp. 429–52. *DOI.org (Crossref)*, <https://doi.org/10.1177/1362480697001004002>.

Lawson, Tony, and Tim Heaton. “Socio-Cultural Explanations of Crime and Deviance.” *Crime and Deviance*, edited by Tony Lawson and Tim Heaton, Macmillan Education UK, 1999, pp. 47–89. *Springer Link*, https://doi.org/10.1007/978-1-349-14035-0_3.

“The Unfair Role of Race in the Criminal Justice System in Just Mercy, a Book by Bryan Stevenson: [Essay Example], 1180 Words.” *GradesFixer*, <https://gradesfixer.com/free-essay-examples/the-unfair-role-of-race-in-the-criminal-justice-system-in-just-mercy-a-book-by-bryan-stevenson/>.

“The Story of Walter McMillian in Just Mercy by Bryan Stevenson - Free Essay Example.” *PapersOwl.Com*, 31 Oct. 2019, <https://papersowl.com/examples/the-story-of-walter-mcmillian-in-just-mercy-by-bryan-stevenson/>.

Social Injustices In Just Mercy, By Bryan Stevenson / Bartleby.

<https://www.bartleby.com/essay/Social-Injustices-In-Just-Mercy-By-Bryan-FJY6BCBXG6>.

Administrator. "Cross-Cultural Studies Research Paper." *IResearchNet*, 5 Sept. 2020,

<https://www.iresearchnet.com/research-paper-examples/culture-research-paper/cross-cultural-studies-research-paper/>.

---. "Culture and Personality Research Paper." *IResearchNet*, 10 Sept. 2020,

<https://www.iresearchnet.com/research-paper-examples/culture-research-paper/culture-and-personality-research-paper/>.

---. "Environmental Psychology Research Paper." *IResearchNet*, 14 Jan. 2021,

<https://www.iresearchnet.com/research-paper-examples/psychology-research-paper/environmental-psychology-research-paper/>.

"Law and Society in 'Just Mercy' - Free Essay Example." *PapersOwl.Com*, 16 Jan. 2020,

<https://papersowl.com/examples/law-and-society-in-just-mercy/>.

Lawson, Tony, and Tim Heaton. "Socio-Cultural Explanations of Crime and Deviance." *Crime and Deviance*, edited by Tony Lawson and Tim Heaton, Macmillan Education UK, 1999, pp. 47–89. *Springer Link*, https://doi.org/10.1007/978-1-349-14035-0_3.

"LitCharts." *LitCharts*, <https://www.litcharts.com/lit/just-mercy/introduction-higher-ground>.

Angus, Jeanelle, and Vaughn Crichlow. "A race and power perspective on police brutality in America." *FAU Undergraduate Research Journal* 7 2018: 8-8.

Berl, Richard EW, et al. "Prestige and content biases together shape the cultural transmission of narratives." *Evolutionary Human Sciences* 3 2021.

Graham, Amanda, et al. "*Race and worrying about police brutality: The hidden injuries of minority status in America.*" *Victims & Offenders* 15.5 2020: 549-573.

Pittman, Cassi. "Shopping while Black": Black consumers' management of racial stigma and racial profiling in retail settings. "*Journal of Consumer Culture* 20.1 2020: 3-22.

Tamariz, Monica. "Replication and emergence in cultural transmission." "*Physics of Life Reviews* 30 2019: 47-71.