Investigating the Evolution of Internet Memes and its Impact on the Behaviour and Engagement of the Audience

Submitted In Partial Fulfilment of Requirements
For the Degree Of

Master of Business Administration (Healthcare Management)

By

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2021-23

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Date: 06/03/2023

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DECLARATION

I declare that this written report submission represents the work done based on my and / or others' ideas with adequately cited and referenced the original source. I also declare that I have adhered to all principles of academic honesty and integrity as I have not misinterpreted or fabricated or falsified any idea/data/fact/source/original work/ matter in my submission.

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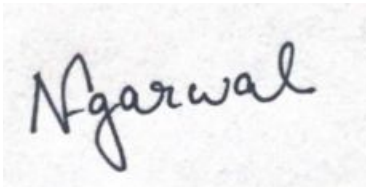

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Acknowledgement

I want to show my heartfelt gratitude to Prof. Prerna Mahindroo, K J Somaiya Institute of Management, Mumbai, for her valuable guidance and encouragement throughout the preparation of this research paper. Prof. Prerna Mahindroo provided keen insights and expertise, which helped my research tenure immensely. I want to show my gratitude for always being so approachable and understanding in delivering relevant solutions to my problems encountered in the research. Overall, it was a fruitful opportunity to learn and grow professionally, and I shall carry forward the skills I received in the best possible way to improve further. I would also like to thank several other people who took time out of their busy schedules to fill up my survey.

This thesis would not have been possible without the help of everyone irrespective of their size of help. I am sincerely thankful to all involved in this process.

EXECUTIVE SUMMARY

In the last couple of years, the pace of change is quickening. Game-changing movements are occurring in the market and with regards to consumer needs and expectations. The need to comprehend what truly makes consumers tick is imperative. This study aims to investigate the evolution of internet memes and their impact on the behaviour and engagement of the audience. Internet memes are a ubiquitous form of cultural expression and social commentary that have become increasingly popular in the digital age. However, little is known about how memes evolve over time and how they influence the usage and sharing behaviours of their audience.

Social media, contrary to traditional media, depends on intensive levels of consumer involvement, commitment, co-creation and spread. By the very act of forwarding, there is an implicit underwriting of the content. The expansion of social media has prompted Internet memes to spread rapidly and reach more individuals. Be that as it may, the key components influencing a recipient's choice to forward a Meme have so far gotten meager consideration.

The purpose of the study is to analyze the evolution of memes over the last two decades and to understand the factors affecting the shareability of Internet Memes across social media networks. The approach of the study is to use a set of images from few of the most trending memes in last few years and enabling the participants to reason and categorize them. Analysis is done on SPSS, Tableau and Excel to get optimized results of the consumer's psyche.

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Chapter 1
Introduction

1.1 Background

The advent of digital technology and specifically the Internet has altered the way people research, discover, share, shop and connect. With the progression of technology, individuals' media consumption habits have shifted towards spending more time online communicating, sharing and accessing information quickly (Drury, 2008). People tend to gather information from multiple online sources, share it with their network and interact with friends, making social media a crucial part of the new communication system.

Social media is described as the fusion of technology and human science, transforming one-way communication to two-way communication (Solis). It is one of the most widely used communication channels of the 21st century. Sharing content online has become a regular part of modern life, with individuals sharing articles, videos, and restaurant reviews with their contacts. Surveys show that 59% of participants share online content regularly (Allsop, Bassett, and Hoskins 2007).

The widespread availability of the Internet has facilitated access to a vast amount of information and data through multiple digital platforms via digital devices, such as smartphones and wearable technologies, allowing for sophisticated communication practices in everyday life (Lomborg & Bechmann, 2015: 2).

Statistics show that 66% of the world's Internet population visits a social networking site or blog (Nielsen, 2009). Time spent on social sites now exceeds messaging time. Around 52% of people who find news online share it with friends through social networks, messages or posts (Morrissey, 2009). Facebook alone has over 750 million active users, with over 250 million accessing the site through their mobile phones (Facebook Statistics, 2011).

While social transmission is both ongoing and crucial, less is understood about why certain online content is shared more than others. For example, why do some customer service experiences spread throughout the blogosphere while others go unnoticed? Or why do some articles make it to a site's "most e-mailed list" while others do not.

Studies on internet memes have sparked a lively academic debate among scholars in the past two decades due to increasing interest. A large number of studies have been offered to understand this cultural phenomenon that emerged in the digital age, adopting various approaches.

The ongoing process of "glocalization" (Roberston qtd. in Shifman and Thelwall), the blending of global and local, has transformed the Internet into a global platform (mirroring global culture with Western influences) allowing people to discuss local and global topics, reflecting reality and often language, in close proximity.

1.2 Motivation

The study of memetics and images started in 1976 with the publication of Richard Dawkins' "The Selfish Gene", where the concept was introduced. However, the focus on Internet memes, where content spreads from user to user and changes along the way, is a recent development. Researchers have largely tried to capture individual moments in the story and made comparisons using synchronic methods for memes, such as spread (Shifman and Thelwall), advancement (Miltner, of LOLcats), or their role in subcultures (van de Fliert). However, the history and development of the rapidly growing phenomenon of Internet memes has gone unnoticed by scholars to date. The history of memes is crucial in understanding digital culture, not only because it has become a characteristic of an Internet subculture, but because it is gaining new significance and power as it enters the mainstream.

There has been limited research on the evolution of Internet memes and their impact on consumer behaviour and how companies can use it to their benefit to market themselves better. Some studies have linked emotions and content with the virality of Internet memes on specific social media sites like Facebook, Instagram, or YouTube, but none from a consumer

perspective. The motivation for this thesis came from the curiosity surrounding the viral success of the recent world record-breaking meme "The Blinkit-Zomato Meme". As there is a lack of academic research on the topic, this thesis is exploratory in nature, seeking to understand the demographic factors that influence the shareability of Internet memes over time.

1.3 Aims and Significance

The study aims to examine the effects of the type of internet memes shared on social media sites such as Facebook, Instagram, WhatsApp, etc. on consumer preferences and likelihood of forwarding memes from different categories over time. It looks into the factors that influence a consumer's decision to share a meme, as well as the impact of demographics on meme categorization and shareability. Additionally, this thesis provides a summary of the most popular memes, changes in meme trends, and corresponding changes in consumer behaviour towards them.

The main objectives of the thesis are:

1. To analyse the correlation between the popularity of a type of meme over time and its appeal to different genders.
2. To determine the factors that contribute to a meme's virality from the perspective of consumers and how it can be used by businesses.
3. To understand how changes in the psychology of consumers influence the evolution of memes.

1.4 Internet Memes

1.4.1 Definition

The concept of Internet memes draws from the principles of evolutionary science, which were introduced by Richard Dawkins. Dawkins coined the term 'meme' based on the Greek word "mīmēma" meaning "something imitated" to describe non-genetic behaviors and social ideas that are transmitted from one individual to another. Since then, there has been much debate about what constitutes a meme, but a substantive definition has yet to be agreed upon. With

the rise of the internet, the term 'meme' was also applied to content that spreads from user to user online.

The first scholarly definition for this type of content was provided by Patrick Davison in 2009, who defined an internet meme as a piece of culture, often a joke, that gains influence through online transmission. Milner (2012, 2013) also defined memes as polyvocal amateur media artifacts, meaning the ability to engage with different texts and therefore voices and personalities through media.

In an attempt to establish a systematic definition, Díaz & Mauricio discussed memes and referred to prominent memeticists. They proposed that an internet meme is a unit of information (thought, idea, or belief) that spreads through the internet (email, chat, forums, social networks, etc.) in the form of a hyperlink, video, picture, or text, and can be transmitted precisely or can change and evolve in meaning while maintaining the structure of the meme or vice versa.

1.4.2 Attributes

The rapid spread of Internet memes is attributed to the internet's ability to allow instant and fast sharing of content in the digital age. They are also highly replicable through copy-and-paste, using techniques such as collage, remix, Photoshop, parodies, mashups, mimicry, imitation, and intertextuality. (Sources: Davison 2012; Díaz & Mauricio 2013; Veszelszki 2013; Kuipers 2002, 2005; Dynel 2016; Milner 2012; Shifman 2011, 2014a; Wiggins & Bowers 2015).

1.4.3 Evolution

From the Beginning

The 90s

The earliest known Internet meme is the Emoticon, created by Scott E. Fahlman in 1982, which was a sideways smiley face made of punctuation marks. This soon became a popular symbol across various communities and demonstrated early qualities of Internet memes.

In 1996, "The Dancing Baby" became a hit, originating as a product demo for Character Studio software, but soon gaining widespread popularity through TV shows and websites.

Another popular meme from 1997 was "Bert is Evil," a theory that the character from Sesame Street was sinister. The meme gained traction through a website that encouraged user submissions, which the owner would upload. This lasted until 2006.

In 1999, "The Hamster Dance" meme emerged, a collection of GIFs featuring dancing hamsters. It became popular through blogs, emails, and pranks."

The 2000s

One of the most significant Internet phenomena in the mid-2000s was "All Your Base Are Belong to Us," a meme that originated from a poorly translated opening sequence of the 1989 arcade shooter game Zero Wing. The meme had been popular since 1998, but reached new heights after November 2000 when Something Awful created a Photoshop thread dedicated to it. The thread was reported to have over 2,000 images, which was only the beginning of an explosion of similar images of street signs, restaurant awnings, movie posters, advertising, cartoons, T-shirts, tattoos, and even golf balls placed on turtles, all bearing this new expression.

In 2003, an epidemic of images depicting situations of complete idiocy called "Epic Fail" arose. Many websites, such as Epicfail.com, were dedicated to showcasing collections of these memes. The following year saw the rise of the "Numa Numa Guy" meme, followed by "Chuck Norris facts."

The mid-2000s saw a huge influx of pet photos on the Internet, leading to the creation of new Internet meme trends, such as "Advice Dog" and "LOL Cats," which resemble comics. Both trends took place in 2006 and played a significant role in shaping the present meme culture. Advice Dogs were head cut-out images pasted over colorful backgrounds with text around the face, while LOL Cats were popularized via 4chan's weekly feature "Caturday" and were text-oriented macro images.

2008 marked the rise of the "Rage Comics" phenomenon, which was a literal representation of comic-style Internet memes. Iconic events, emotions, and actions were depicted in this series, with the "FFFUUUU Rage Guy" being the most popular. Reddit played a major role in popularizing the Rage phenomenon, leading to the creation of new characters such as Trollface, Forever Alone Guy, "Y U NO" Guy, and Cereal Guy, all created using simple drawing software.

Over the past decade, there have been various trending Internet memes, including head cut-out images, macro images, text-only memes (such as the "Keep Calm" series), animated representations of events (such as "Rage Guy" and "Pepe the Frog"), and movie video memes (such as "All Star" song and the dancing pumpkins from "Spooky Scary Skeletons").

The next decade saw an exponential increase in the variety of Internet memes and world-record-breaking viral phenomena. Tracking the most popular memes became increasingly difficult as the years went by. This decade saw some of the evergreen, ever-funny meme series, such as "Grumpy Cat" (2012) and "Starter Packs" (2014). Global trending challenges, such as the "Harlem Shake" (2013), "Ice Bucket Challenge" (2014), "Mannequin Challenge" (2015), "The Floor is Lava Challenge" (2017), "Kiki Challenge" (2018), “The Egg Meme” (2019), “JCB ki Khudai” (2020), “Anakin and Padme Meme” (2021), “She’s/He’s a 10 but…” and more, were also popular. Celebrity memes, such as the Kanye and Taylor scandal, "Hot Bling Dance," Adele's "Hello" song, “Kim K at the Met Gala”, “the Slap” by Will Smith, were also among the most trending memes.

In recent years, the Internet of memes has become less strict in being just humorous or relatable, and more remixed in nature, displaying various properties of different types of memes layered into one. The interpretation has become more individualistic and dependent. One example of this layered nature of an Internet meme is "The Blinkit-Zomato," which broke the internet and was very much liked post by audiences on Instagram and across all social media platforms.

1.5 Chapter Planning

This study has been performed under the following chapters:

CHAPTER 1 gives a brief introduction about the topic and talks about the aim & significance and motivation for the study.

CHAPTER 2 talks about the various research papers that have been reviewed. It also talks about the gap in the literature on the basis of which this study has taken place

CHAPTER 3 includes the analysis and interpretation of the primary data and the secondary data.

CHAPTER 4 shows all the graphs, tables, charts, etc. which was used in order to analyze data through the application of various tools and techniques

CHAPTER 5 draws various conclusions based on all the findings of the study.

CHAPTER 6 mentions all the limitations that are present in the study.

CHAPTER 7 talks about the future scope of the research.

Chapter 2

Literature Review

The intensification of Internet meme culture started in late 20th century. Booming new technologies have made the use of Internet lot more convenient which resulted in Memes becoming a vital part of our present lifestyle.

Internet memes have become a popular and ubiquitous form of cultural expression in the digital age. The term "meme" was first coined by Richard Dawkins (1976) to describe an idea or behavior that spreads within a culture, and has since been extended to include various forms of digital media that are shared and remixed online. This literature review aims to examine the evolution of internet memes and their impact on the behaviour and engagement of the audience.

Internet memes have evolved rapidly over the past two decades, driven by the rise of social media platforms and the proliferation of user-generated content. According to Shifman (2013), memes can be classified into various types based on their format, content, and purpose. For example, image macros are memes that consist of a picture with overlaid text, while reaction memes are memes that express a particular emotion or response. Memes can also be classified by their source, such as user-generated memes, corporate-sponsored memes, or political memes.

Online memes are also a form of self-expression (Christodoulides, Jevon, & Bonhomme, 2012). Although measuring memes is challenging as there are no defined units to quantify them, they are ubiquitous, particularly on social media platforms and photo aggregators, where they allow users to express themselves freely. In terms of web usage, a meme is an item that has been widely replicated by various users with varying messages but a persistent underlying meaning.

The theory of memetics has developed from the idea that humans learn through imitation of others. According to Blackmore (1999) and Yufan & Ardley (2007), everything we acquire from culture, such as songs, fashion trends, and even handshakes, can be classified as a meme, which is assimilated into our own lives. Memes are self-replicating entities that spread through culture by jumping from person to person.

The evolution of memes has also been driven by changes in the way people consume and share information. As noted by Knobel and Lankshear (2010), memes are often created in response to popular culture, events or personalities. This means that the evolution of memes is closely linked to the changes in popular culture and the media landscape.

Internet memes have also been shown to have a significant impact on the behavior of individuals on social media platforms. According to Gao, Ciampaglia, and Ferrara (2017), memes can be used to create a sense of community among users by promoting shared values and beliefs. This, in turn, can lead to increased engagement and participation on social media platforms.

According to Cheng et al. (2014), memes can evoke various emotional responses such as humor, anger, and sadness, and can influence the audience's attitudes and beliefs. Memes can also create social cohesion and foster a sense of community among like-minded individuals. Moreover, memes can serve as a platform for social and political commentary, mobilizing action, and raising awareness about important issues.

Internet memes have a significant impact on the behaviour and engagement of the audience. According to Milner (2016), memes can influence the formation and change of social norms, attitudes, and beliefs, as well as the emotional and cognitive responses of the audience. Memes can also serve as a means of social and political commentary, and can influence public opinion and discourse. For example, political memes can be used to criticize politicians, highlight social issues, and mobilize political action. Memes can also have commercial applications, as marketers and advertisers use memes to promote products and services and increase brand awareness.

The study of memes is important because they play a significant role in society, even if they go unnoticed. Coker (2008) notes that memes are similar to genes in that they bring about cultural change through a process similar to natural selection, where those that are passed on through imitation and learning tend to dominate social life. Memes can be seen as parasitic or viral, and the concept of mutation applies to them in the same way as genes. Memes may come into contact with a host (person) who then mutates the meme's original meaning into something that suits their own needs. While most studies of memes focus on culture and the replication of behaviors, this paper examines the current trend of internet memes in the era of Web 2.0 and their impact on how internet users perceive products and brands.

While tracking the origin of a meme may be difficult, users can easily create their own by using websites such as knowyourmeme.com and quickmeme.com, which offer a range of visuals for users to add their own captions and share with others on social networking sites such as Facebook, Reddit, StumbleUpon, and theCHIVE. According to former Quickmeme employee Wayne Miltz, the goal of Quickmeme is to provide a simple, fast, and easy way for users to create memes that encapsulate their own witty observations on pictures of socially awkward penguins or hipster baristas (Owens, 2013).

While users can express their opinions and experiences through memes, this trend also presents new opportunities for advertising and brand management. In the modern era, where marketers and consumers have shifted to a more horizontal relationship, brands must develop a strategy to handle public opinion, as consumers now have more power than ever in shaping brand-related discussions. This creates a challenge for an integrated marketing strategy, which aims to maximize consistency in the messages reaching consumers (Bruce & Solomon, 2013).

Memes, along with other user-generated content, have become popular subjects for brand-related material, giving consumers a new level of power to share their opinions via word-of-mouth. Even though people may not interact with each other in the same way as they did before, the trend of seeking out consumer information and being product-savvy continues to rise, making memes an effective way to share word-of-mouth advertising (Yufan & Ardley, 2007).

Wojcieszak and Kim (2016) explored the role of memes in shaping public opinion on climate change. The study found that individuals who were exposed to climate change memes were more likely to view climate change as a serious issue and express support for action to address it. Several scholars have argued that memes can be a powerful tool for engaging and mobilizing individuals around social and political issues.

A study by Knobloch-Westerwick, Mothes, and Münch (2015) investigated the impact of social identity on the sharing of political memes on social media. The study found that individuals are more likely to share political memes that align with their social identity, as well as those that they perceive as reflecting positively on their group. Additionally, the study identified the role of social comparison in driving the sharing of political memes, as individuals tend to share memes that reflect positively on their group in comparison to others.

Another study by Shifman (2013) explored the role of self-expression in the creation and sharing of memes, highlighting the importance of memes as a form of cultural commentary and expression of identity. The study found that memes are often used to express complex emotions and attitudes in a concise and easily shareable format, and that they play a critical role in shaping cultural discourse and identity.

Wang and Lin (2020) examine the impact of internet memes on consumer behavior. They argue that memes can influence consumer attitudes and purchasing decisions by creating a sense of familiarity and trust. Memes can also be used to create a sense of urgency and exclusivity, encouraging consumers to act quickly and take advantage of limited-time offers.

Hargittai and Marwick (2016) discuss the cultural and social implications of internet memes. They argue that internet memes can be used to convey complex ideas and messages in an accessible and entertaining way. Memes are often used to challenge dominant cultural norms and ideas, and to provide a space for marginalized groups to express themselves. Internet memes can also be used to create a sense of community among users who share similar values and beliefs.

From the book ‘The Selfish Gene’ by Darwins, I have employed a scholarly structure to help in contemplating how human culture and thoughts are passed on and advance. It basically expresses that the standards of memeties are that "great" thoughts get themselves reproduced and make due in the long haul while "awful" thoughts don't and vanish (Roach, 2006). Darwins had listed very simple three characteristics that can be applied to genes, memes or any other thing that can replicate itself successfully. The three characteristics of the Darwin’s Big Idea for natural selection are:

1. Fidelity – The core or originality of the content is maintained while replicated
2. Fecundity – The ease of replication affects the rate of copying thus affected the widespread of the content
3. Longevity – The longer a pattern survives replication the more probability of copying it thus increasing the overall life of the content

The virality system by Nahon and Hemsley's (2013) gives a significant hypothetical focal point to comprehend the way toward acquiring representative power for organized social developments. Virality is characterized as "a social data stream process where numerous individuals all the while forwarding a particular data thing, over a brief timeframe, inside their informal communities, and where the message spreads past their own (interpersonal organizations) to various, frequently far off systems, bringing about a sharp increasing speed in the quantity of individuals who are presented to message". (Nahon and Hemsley, 2013, p. 16)

This structure recognizes two systems of viral procedure: a base up procedure, amid which the viral procedure is driven by people or associations that mean to spread the substance; a top-down procedure, amid which virality is planned by substance producers and advanced by ground-breaking watchmen, for example, prevailing press or political elites.

In arranged social developments, virality is all the more regularly determined by the base up an instrument is given developments' substantial dependence on self-propelled members in dispersing development messages (Castells, 2012).

The base up virality system comprises of two noteworthy powers (Nahon and Hemsley, 2013). To start with, data qualities impact whether and how individuals will share certain substance inside their interpersonal organizations, explicitly the factor of striking nature and pertinence. The more striking a message, and the more applicable the specific situation, the higher the likelihood of sharing. The second factor is the structures of systems, which incorporate the standards, practices, and plans that control individuals' practices in systems, and how individuals are associated by means of social relations (Wong, 2016).

Measuring the impact of internet memes on audience behaviour and engagement is a challenging task, as memes can be difficult to quantify and analyze. According to Zhou and Lin (2018), various metrics can be used to measure the popularity, virality, and impact of memes. These metrics include the number of shares, likes, and comments on social media platforms, as well as sentiment analysis and network analysis.

While some studies have examined the factors that affect the virality of memes, the literature lacks a comprehensive understanding of the factors that contribute to the shareability of memes and their potential impact on businesses in marketing. Specifically, a gap exists in understanding how the categorisation of memes affects their shareability, and how businesses can leverage this information to create effective marketing campaigns. Additionally, there has been no research done in order to understand the presence of any association between gender and the various types of meme. Therefore, future research could focus on exploring the interplay between factors affecting the shareability of memes, categorisation of memes based on audience's perception, association of memes with gender and their potential implications for businesses in marketing. This could include studies that investigate the ways in which categorisation of memes affects their shareability, as well as surveys and other methods for gathering data on the motivations and preferences of meme audiences and how businesses can incorporate memes into their marketing campaigns.

Chapter 3

Research Methodology

The study conducted is a combination of exploratory and descriptive research methodologies. The focus of the research was to understand the way audiences interact with various memes and the various factors that influence consumers in forwarding a meme. To achieve this, both primary and secondary data was collected.

- Secondary data was obtained from published and unpublished sources to support the research.
- Primary data was gathered through a survey that targeted individuals from all age groups.

To obtain information a structured questionnaire was formulated containing various closed questions designed that went from being general to more specific.

Step 1: Defining Objectives

I. To analyse the correlation between the popularity of a type of meme over time and its appeal to different genders.
II. To determine the factors that contribute to a meme's virality from the perspective of consumers and how it can be used by businesses.
III. To understand how changes in the psychology of consumers influence the evolution of memes.

Step 2: Finalizing the Set of Memes

The initial stage of the research involved reviewing articles about the most popular memes from various years to create a list for further investigation. The memes were chosen based on their level of engagement, including the number of likes, shares, comments, tweets, and views they received. The memes that generated the most buzz on various social media platforms,

such as Instagram, Facebook, Twitter, and Reddit, were included in the final sample set for the survey. This final set consisted of 10 memes from the years 2013 to 2023.

Step 3: Survey Responses

The convenience sampling method was used to collect responses for the survey from the audience. The survey was conducted for a sample size of 101 people belonging to different set of age groups across Metro, Tier I and Tier II cities. A questionnaire of 14 questions was floated. Each respondent was asked to indicate preference for the social media site usage, reasons to share content online and specify their preference of type of content. The core study involved in understanding the change in their behaviour towards a set of Memes that were presented to them for the survey. The respondents were asked to rate the Likeliness to forward each Meme in past and present as well as to categorize them.

Step 4: Tools and Techniques used

In order to analyse the data, various software tools such as SPSS, Microsoft Excel and Tableau were used. Various types of pie charts, bar charts, tables and other form of graphs have been used to present the data and findings of the research. Also, to collect data, a google form was used to make a questionnaire which was circulated online through mail and various type of social media platform. Lastly, the following techniques have been used to analyse the data collected:

1. Descriptive statistics: To understand the demographics of the respondents
2. Rank Order: To determine top 3 most preferred social sites
3. Chi-square Test: To determine relationship of gender on categorization of memes
4. One-way Annova: To Identify the favorable and unfavorable perception of age group on factors influencing the forwarding of memes
5. Correlation analysis: To determine the level of association of a meme over a period of time

Chapter 4

Data Analysis

4.1 Descriptive Analysis

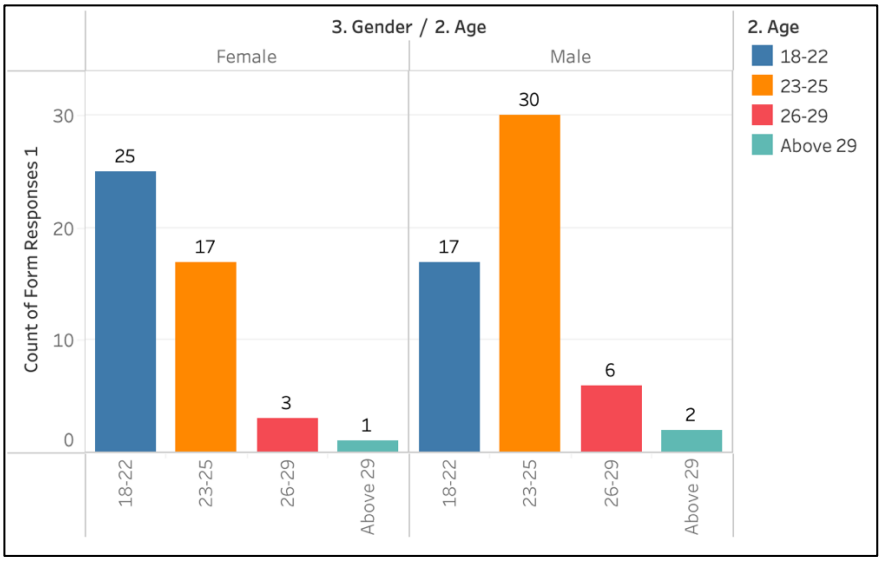

Fig 1. Age group vs Gender

Out of the 101 responses collected, 46 were from female and rest 55 were from male respondents. The highest number of male respondents were from the age group of 23-25 years whereas in female respondents, the highest number of responses were received in the age group of 18-22 years. The highest number of respondents i.e. 47 are aged between 23-25 years, followed by 42 respondents who are aged between 18-22 years. The least number of respondent are 3 and are aged above 29 years.

Table 1 – Gender wise age profile of respondents

Age of respondents	**Gender**		**Total**
	Male	**Female**	
18-22	17	25	42
23-25	30	17	47
26-29	6	3	9
Above 29	2	1	3
Total	**55**	**46**	**101**

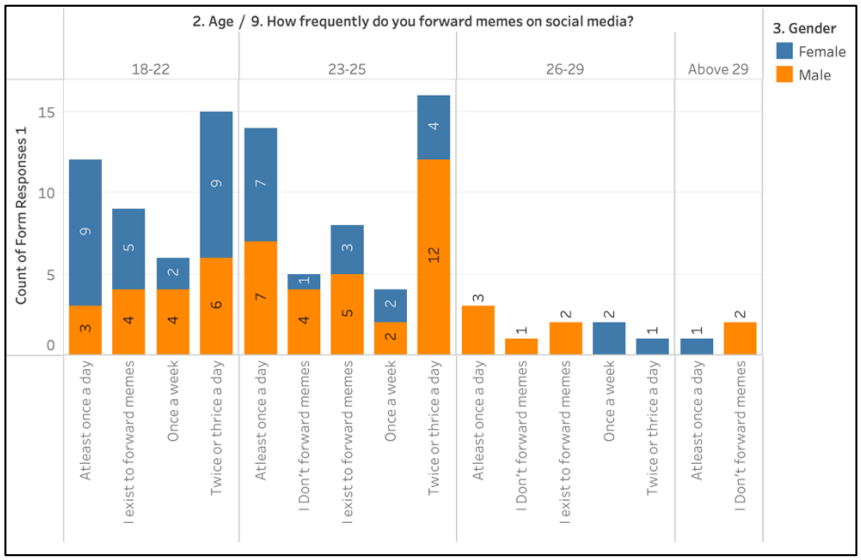

Fig 2. Age & Gender vs frequency of forwarding memes

From the above bar graph, we can see that everyone in the age of 18-22 years forwards meme. No male or female in that age group does not forward a meme. More memes are forwarded by females in the age group of 18-22 years. In case of male respondents, highest number of respondents lies in the range of 23-25 years old and forwards memes atleast once or twice or thrice a day. Highest number of memes are forwarded by both males and females in the age group of 23-25 years.

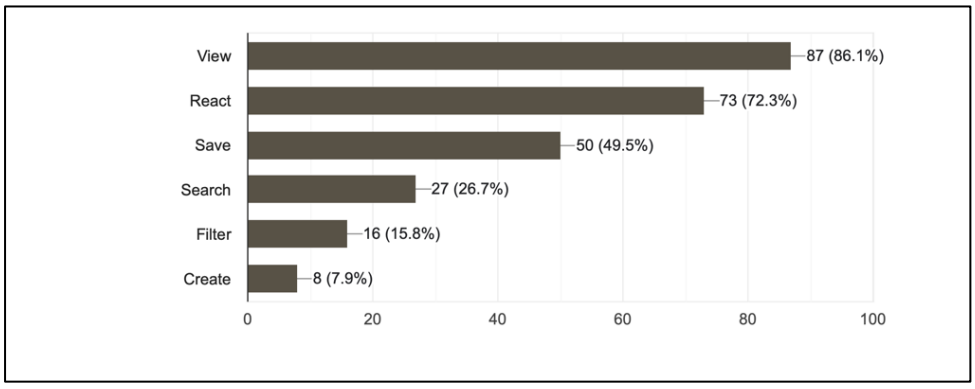

Fig 3. Respondents' interaction with memes

Respondents usually interact with a meme by usually viewing it (86.1% of the respondents), followed by reacting to the meme (73 respondents or 72.3%), Saving the meme, searching the meme, filtering the meme and lastly only 8 respondents i.e. 7.9% of the respondents create memes.

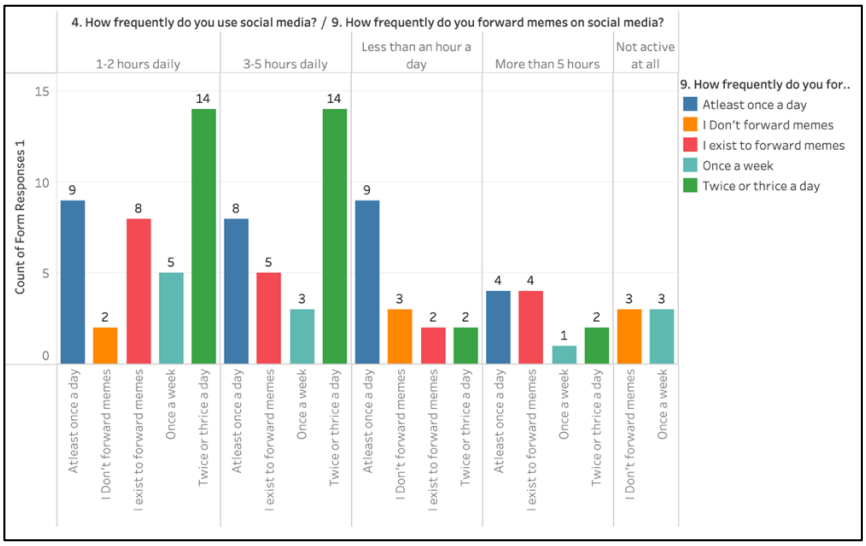

Fig 4. Frequency of usage of social media vs frequency of forwarding memes

Most respondents i.e. 38 spend 1-2 hours daily, followed by 30 respondents who spend 3-5 hours on social media daily. Only 6 respondents do not spend time on social media and 16 respondents spend less than an hour daily on social media. Respondents who spend 3-5 hours daily or more than 5 hours a day on social media definitely forwards memes. People who usually spend 1-5 hours daily on social media tend to forward memes twice or thrice a day. Also, people who aren't active on social media either do not forward a meme or forwards meme once a week.

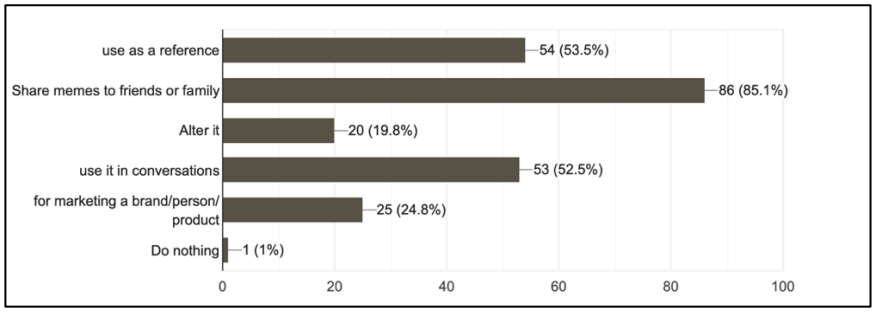

Fig 5. Memes usage by respondents

Highest number of respondents i.e. 86 respondents (85.1%) share memes to their friends and family, followed by 54 respondents who use memes as a reference, 52.5% respondents use memes in conversation, 25 respondents use it for marketing a product/ person/ brand and 19.8% respondents alter the memes. Also, only 1% of the respondents does nothing with memes.

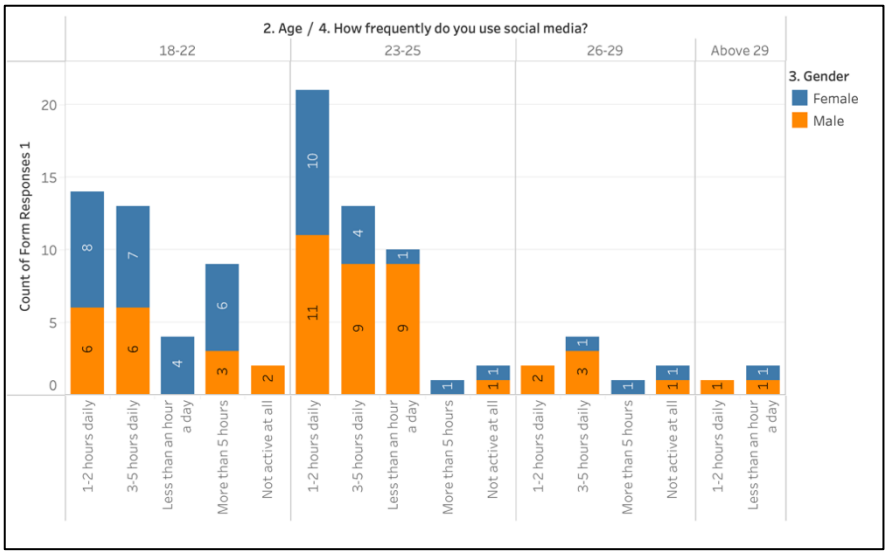

Fig 6. Age group & Gender vs usage of social media

From the above graph, females in the age group of 18-22 years spend more time on social media than males. Whereas, more males in the age group of 23-25 spend time on social media. Highest number of females and males in the age group of 23-25 years spend around 1-2 hours daily on social media. Females in the age group of 18-22 spends at least 1 hour daily on social media. Usually, they spend 1-5 hours daily on social media. People who are 29 years or above spends only 1-2 hours daily or even less than an hour a day.

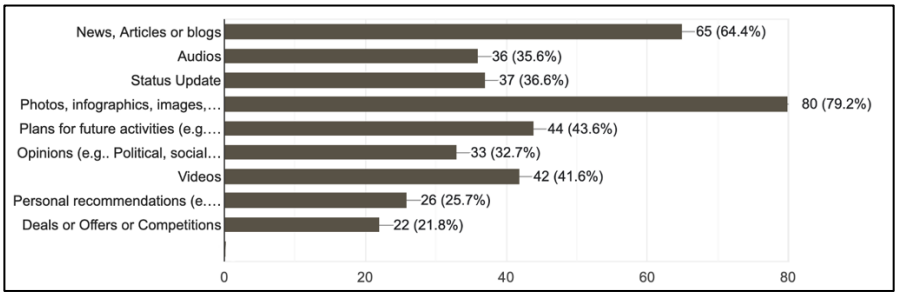

Fig 7. Type of content shared on social media

Photo infographics, images, memes or illustrations were the highest type of shared internet content on social media. Around 72.9% of the respondents shares photos, infographics, images, memes or illustration over social media. This is followed by News, Articles or blogs and then by videos. The least form of content shared by respondents is deals or offers on competitions followed by personal recommendations (e.g., reviews).

4.2 Gender and Categorization- Chi-square tests

As, both "Gender" and "Categorization" values are nominal, we can perform Chi-square test to check any relationship between the two.

Hypothesis:

H0[null hypothesis]: There is no significant association between the gender and the likeliness of the meme.

H1[alternate hypothesis]: There is a significant association between the gender and the likeliness of the meme.

4.2.1 Instagram Egg * Gender

Table 2- Instagram Egg * Gender Crosstab

Please categories the meme according to your preference [The Instagram Egg] * Gender Crosstabulation

			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [The Instagram Egg]	Challenged your views	Count	0	2	2
		Expected Count	.9	1.1	2.0
	It never made sense	Count	10	16	26
		Expected Count	11.8	14.2	26.0
	It was Controversial/Shocking	Count	8	2	10
		Expected Count	4.6	5.4	10.0
	It was Evergreen	Count	18	20	38
		Expected Count	7.7	9.3	17.0
	It was Situational/Relative	Count	7	10	17
		Expected Count	17.3	20.7	38.0
	It was unexpected/ surprising	Count	3	5	8
		Expected Count	3.6	4.4	8.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 2 of the audience thought that the Instagram egg meme challenged their view and both of them were males.
2. 26 people thought that the Instagram egg meme never made sense, out of which 10 were females and rest 16 were males.
3. 10 people found the Instagram egg meme controversial/ shocking, out of which 8 were females and 2 were males.
4. 38 people found the Instagram egg meme evergreen, out of which 18 were females and 20 were males.
5. 17 people thought the Instagram egg meme was situational/relative, out of which 7 were females and rest 10 were males.
6. 8 people thought the Instagram egg meme was unexpected/ surprising, out of which 3 were females and rest 5 were males.

Table 3- Instagram Egg * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	7.376[a]	5	.194
Likelihood Ratio	8.364	5	.137
N of Valid Cases	101		

a. 5 cells (41.7%) have expected count less than 5. The minimum expected count is .91.

The significance value of Pearson Chi-Square is 0.194 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and "Instagram Egg".

4.2.2. Girls like you * Gender

Table 4- Girls Like You * Gender Crosstab

Please categories the meme according to your preference ["Girls like you" Lip Sync of Father-Daughter duo] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference ["Girls like you" Lip Sync of Father-Daughter duo]	Challenged your views	Count	2	3	5
		Expected Count	2.3	2.7	5.0
	It never made sense	Count	2	4	6
		Expected Count	2.7	3.3	6.0
	It was Controversial/Shocking	Count	5	3	8
		Expected Count	3.6	4.4	8.0
	It was Evergreen	Count	24	20	44
		Expected Count	20.0	24.0	44.0
	It was Situational/Relative	Count	6	22	28
		Expected Count	12.8	15.2	28.0
	It was unexpected/ surprising	Count	7	3	10
		Expected Count	4.6	5.4	10.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 5 of the audience thought that the “Girls Like You” meme challenged their views, out of which 2 were females and rest 3 were males.
2. 6 people thought that the “Girls Like You” meme never made sense, out of which 2 were females and rest 4 were males.
3. 8 people found the “Girls Like You” meme controversial/ shocking, out of which 5 were females and 3 were males.
4. 44 people found the “Girls Like You” meme evergreen, out of which 24 were females and 20 were males.
5. 28 people thought the “Girls Like You” meme was situational/relative, out of which 6 were females and rest 22 were males.

6. 10 people thought the "Girls Like You" meme was unexpected/ surprising, out of which 7 were females and rest 3 were males.

Table 5- Girls Like You * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.765[a]	5	.038
Likelihood Ratio	12.313	5	.031
N of Valid Cases	101		

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 2.28.

The significance value of Pearson Chi-Square is 0.038 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and "Girls Like You".

4.2.3. UP Cop- Thain Thain * Gender

Table 6- UP Cop Thain Thain * Gender Crosstab

Please categories the meme according to your preference [UP cop - Thain Thain] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [UP cop - Thain Thain]	Challenged your views	Count	1	3	4
		Expected Count	1.8	2.2	4.0
	It never made sense	Count	8	6	14
		Expected Count	6.4	7.6	14.0
	It was Controversial/Shocking	Count	9	11	20
		Expected Count	9.1	10.9	20.0
	It was Evergreen	Count	11	14	25
		Expected Count	11.4	13.6	25.0
	It was Situational/Relative	Count	9	11	20
		Expected Count	9.1	10.9	20.0
	It was unexpected/ surprising	Count	8	10	18
		Expected Count	8.2	9.8	18.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 4 of the audience thought that the "UP Cop- Thain Thain" meme challenged their views, out of which 1 were females and rest 3 were males.
2. 14 people thought that the "UP Cop- Thain Thain" meme never made sense, out of which 8 were females and rest 6 were males.
3. 20 people found the "UP Cop- Thain Thain" meme controversial/ shocking, out of which 9 were females and 11 were males.
4. 25 people found the "UP Cop- Thain Thain" meme evergreen, out of which 11 were females and 14 were males.
5. 20 people thought the "UP Cop- Thain Thain" meme was situational/relative, out of which 9 were females and rest 11 were males.

6. 18 people thought the "UP Cop- Thain Thain" meme was unexpected/ surprising, out of which 8 were females and rest 10 were males.

Table 7- UP Cop Thain Thain * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.478[a]	5	.916
Likelihood Ratio	1.514	5	.911
N of Valid Cases	101		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 1.82.

The Pearson Chi-Square significance value is 0.916 which is greater than **α**(0.05). Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and "UP-Cop Thain Thain" meme.

4.2.4. The Priya Wink * Gender

Table 8- The Priya Wink * Gender Crosstab

Please categories the meme according to your preference [The Priva Wink] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [The Priva Wink]	Challenged your views	Count	2	4	6
		Expected Count	2.7	3.3	6.0
	It never made sense	Count	10	6	16
		Expected Count	7.3	8.7	16.0
	It was Controversial/Shocking	Count	11	7	18
		Expected Count	8.2	9.8	18.0
	It was Evergreen	Count	13	12	25
		Expected Count	11.4	13.6	25.0
	It was Situational/Relative	Count	4	17	21
		Expected Count	9.6	11.4	21.0
	It was unexpected/ surprising	Count	6	9	15
		Expected Count	6.8	8.2	15.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 6 of the audience thought that the “The Priya Wink” meme challenged their views, out of which 2 were females and rest 4 were males.
2. 16 people thought that the “The Priya Wink” meme never made sense, out of which 10 were females and rest 6 were males.
3. 18 people found the “The Priya Wink” meme controversial/ shocking, out of which 11 were females and 7 were males.
4. 25 people found the “The Priya Wink” meme evergreen, out of which 13 were females and 12 were males.
5. 21 people thought the “The Priya Wink” meme was situational/relative, out of which 4 were females and rest 17 were males.

6. 15 people thought the “The Priya Wink” meme was unexpected/ surprising, out of which 6 were females and rest 9 were males.

Table 9- The Priya Wink * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	10.525[a]	5	.062
Likelihood Ratio	11.090	5	.050
N of Valid Cases	101		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.73.

The significance value of Pearson Chi-Square is 0.062 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and “The Priya Wink” meme.

4.2.5. The Grumpy Cat * Gender

Table 10- The Grumpy Cat * Gender Crosstab

Please categories the meme according to your preference [The Grumpy Cat] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [The Grumpy Cat]	Challenged your views	Count	6	9	15
		Expected Count	6.8	8.2	15.0
	It never made sense	Count	2	7	9
		Expected Count	4.1	4.9	9.0
	It was Controversial/Shocking	Count	6	3	9
		Expected Count	4.1	4.9	9.0
	It was Evergreen	Count	17	20	37
		Expected Count	16.9	20.1	37.0
	It was Situational/Relative	Count	14	11	25
		Expected Count	11.4	13.6	25.0
	It was unexpected/ surprising	Count	1	5	6
		Expected Count	2.7	3.3	6.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 15 of the audience thought that the “The Grumpy Cat” meme challenged their views, out of which 6 were females and rest 9 were males.
2. 9 people thought that the “The Grumpy Cat” meme never made sense, out of which 2 were females and rest 7 were males.
3. 9 people found the “The Grumpy Cat” meme controversial/ shocking, out of which 6 were females and 3 were males.
4. 37 people found the “The Grumpy Cat” meme evergreen, out of which 17 were females and 20 were males.
5. 25 people thought the “The Grumpy Cat” meme was situational/relative, out of which 14 were females and rest 11 were males.

6. 6 people thought the "The Grumpy Cat" meme was unexpected/ surprising, out of which 1 were females and rest 5 were males.

Table 11- The Grumpy Cat * Gender Chi-Square Test

Chi-Square Tests			
	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	6.901[a]	5	.228
Likelihood Ratio	7.278	5	.201
N of Valid Cases	101		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 2.73.

The significance value of Pearson Chi-Square is 0.228 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and "The Grumpy Cat" meme.

4.2.6. Sonam Gupta Bewafaa * Gender

Table 12- Sonam Gupta Bewafaa * Gender Crosstab

Please categories the meme according to your preference [Sonam Gupta Bewafaa] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [Sonam Gupta Bewafaa]	Challenged your views	Count	2	5	7
		Expected Count	3.2	3.8	7.0
	It never made sense	Count	6	11	17
		Expected Count	7.7	9.3	17.0
	It was Controversial/Shocking	Count	10	5	15
		Expected Count	6.8	8.2	15.0
	It was Evergreen	Count	10	11	21
		Expected Count	9.6	11.4	21.0
	It was Situational/Relative	Count	9	15	24
		Expected Count	10.9	13.1	24.0
	It was unexpected/ surprising	Count	9	8	17
		Expected Count	7.7	9.3	17.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 7 of the audience thought that the "Sonam Gupta Bewafaa" meme challenged their views, out of which 2 were females and rest 5 were males.
2. 17 people thought that the "Sonam Gupta Bewafaa" meme never made sense, out of which 6 were females and rest 11 were males.
3. 15 people found the "Sonam Gupta Bewafaa" meme controversial/ shocking, out of which 10 were females and 5 were males.
4. 21 people found the "Sonam Gupta Bewafaa" meme evergreen, out of which 10 were females and 11 were males.
5. 24 people thought the "Sonam Gupta Bewafaa" meme was situational/relative, out of which 9 were females and rest 15 were males.

6. 17 people thought the “Sonam Gupta Bewafaa” meme was unexpected/ surprising, out of which 9 were females and rest 8 were males.

Table 13- Sonam Gupta Bewafaa * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	5.269[a]	5	.384
Likelihood Ratio	5.339	5	.376
N of Valid Cases	101		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 3.19.

The Pearson Chi-Square significance value is 0.384 which is greater than **α**(0.05). Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and “Sonam Gupta Bewafaa” meme.

4.2.7. Pen Pineapple Apple Pen * Gender

Table 14- Pen Pineapple Apple Pen * Gender Crosstab

Please categories the meme according to your preference [Pen Pineapple Apple Pen] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [Pen Pineapple Apple Pen]	Challenged your views	Count	5	7	12
		Expected Count	5.5	6.5	12.0
	It never made sense	Count	10	12	22
		Expected Count	10.0	12.0	22.0
	It was Controversial/Shocking	Count	9	7	16
		Expected Count	7.3	8.7	16.0
	It was Evergreen	Count	7	7	14
		Expected Count	6.4	7.6	14.0
	It was Situational/Relative	Count	9	13	22
		Expected Count	10.0	12.0	22.0
	It was unexpected/ surprising	Count	6	9	15
		Expected Count	6.8	8.2	15.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 12 of the audience thought that the “Pen Pineapple Apple Pen” meme challenged their views, out of which 5 were females and rest 7 were males.
2. 22 people thought that the “Pen Pineapple Apple Pen” meme never made sense, out of which 10 were females and rest 12 were males.
3. 16 people found the “Pen Pineapple Apple Pen” meme controversial/ shocking, out of which 9 were females and 7 were males.
4. 14 people found the “Pen Pineapple Apple Pen” meme evergreen, out of which 7 were females and 7 were males.
5. 22 people thought the “Pen Pineapple Apple Pen” meme was situational/relative, out of which 9 were females and rest 13 were males.

6. 15 people thought the “Pen Pineapple Apple Pen” meme was unexpected/ surprising, out of which 6 were females and rest 9 were males.

Table 15- Pen Pineapple Apple Pen * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	1.301[a]	5	.935
Likelihood Ratio	1.300	5	.935
N of Valid Cases	101		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 5.47.

The Pearson Chi-Square significance value is 0.935 which is greater than **α**(0.05). Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and “Pen Pineapple Apple Pen” meme.

4.2.8. The Distracted Boyfriend * Gender

Table 16- The Distracted Boyfriend * Gender Crosstab

Please categories the meme according to your preference [The Distracted Boyfriend] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [The Distracted Boyfriend]	Challenged your views	Count	5	3	8
		Expected Count	3.6	4.4	8.0
	It never made sense	Count	3	5	8
		Expected Count	3.6	4.4	8.0
	It was Controversial/Shocking	Count	7	9	16
		Expected Count	7.3	8.7	16.0
	It was Evergreen	Count	17	16	33
		Expected Count	15.0	18.0	33.0
	It was Situational/Relative	Count	9	13	22
		Expected Count	10.0	12.0	22.0
	It was unexpected/ surprising	Count	5	9	14
		Expected Count	6.4	7.6	14.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 8 of the audience thought that the "The Distracted Boyfriend" meme challenged their views, out of which 5 were females and rest 3 were males.
2. 8 people thought that the "The Distracted Boyfriend" meme never made sense, out of which 3 were females and rest 5 were males.
3. 16 people found the "The Distracted Boyfriend" meme controversial/ shocking, out of which 7 were females and 9 were males.
4. 33 people found the "The Distracted Boyfriend" meme evergreen, out of which 17 were females and 16 were males.
5. 22 people thought the "The Distracted Boyfriend" meme was situational/relative, out of which 9 were females and rest 13 were males.

6. 14 people thought the "The Distracted Boyfriend" meme was unexpected/ surprising, out of which 5 were females and rest 9 were males.

Table 17- The Distracted Boyfriend * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.367[a]	5	.796
Likelihood Ratio	2.379	5	.795
N of Valid Cases	101		

a. 4 cells (33.3%) have expected count less than 5. The minimum expected count is 3.64.

The significance value of Pearson Chi-Square is 0.796 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and "The Distracted Boyfriend" meme.

4.2.9. Drake * Gender

Table 18- Drake * Gender Crosstab

Please categories the meme according to your preference [Drake Meme] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [Drake Meme]	Challenged your views	Count	2	5	7
		Expected Count	3.2	3.8	7.0
	It never made sense	Count	4	3	7
		Expected Count	3.2	3.8	7.0
	It was Controversial/Shocking	Count	7	9	16
		Expected Count	7.3	8.7	16.0
	It was Evergreen	Count	21	19	40
		Expected Count	18.2	21.8	40.0
	It was Situational/Relative	Count	8	14	22
		Expected Count	10.0	12.0	22.0
	It was unexpected/ surprising	Count	4	5	9
		Expected Count	4.1	4.9	9.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 7 of the audience thought that the "Drake" meme challenged their views, out of which 2 were females and rest 5 were males.
2. 7 people thought that the "Drake" meme never made sense, out of which 4 were females and rest 3 were males.
3. 16 people found the "Drake" meme controversial/ shocking, out of which 7 were females and 9 were males.
4. 40 people found the "Drake" meme evergreen, out of which 21 were females and 19 were males.
5. 22 people thought the "Drake" meme was situational/relative, out of which 8 were females and rest 14 were males.

6. 9 people thought the “Drake” meme was unexpected/ surprising, out of which 4 were females and rest 5 were males.

Table 19- Drake * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.746[a]	5	.739
Likelihood Ratio	2.788	5	.733
N of Valid Cases	101		

a. 6 cells (50.0%) have expected count less than 5. The minimum expected count is 3.19.

The significance value of Pearson Chi-Square is 0.739 which is greater than $\alpha(0.05)$. Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and “Drake” meme.

4.2.10. Blinkit- Zomato * Gender

Table 20- Blinkit-Zomato * Gender Crosstab

Please categories the meme according to your preference [Blinkit-Zomato Meme] * Gender Crosstabulation					
			3. Gender		
			Female	Male	Total
14. Please categories the meme according to your preference [Blinkit-Zomato Meme]	Challenged your views	Count	4	1	5
		Expected Count	2.3	2.7	5.0
	It never made sense	Count	6	9	15
		Expected Count	6.8	8.2	15.0
	It was Controversial/Shocking	Count	4	7	11
		Expected Count	5.0	6.0	11.0
	It was Evergreen	Count	15	12	27
		Expected Count	12.3	14.7	27.0
	It was Situational/Relative	Count	11	19	30
		Expected Count	13.7	16.3	30.0
	It was unexpected/ surprising	Count	6	7	13
		Expected Count	5.9	7.1	13.0
Total		Count	46	55	101
		Expected Count	46.0	55.0	101.0

From the above table, we can interpret the following:

1. 5 of the audience thought that the “Blinkit- Zomato” meme challenged their views, out of which 4 were females and rest 1 were males.
2. 15 people thought that the “Blinkit- Zomato” meme never made sense, out of which 6 were females and rest 9 were males.
3. 11 people found the “Blinkit- Zomato” meme controversial/ shocking, out of which 4 were females and 7 were males.
4. 27 people found the “Blinkit- Zomato” meme evergreen, out of which 15 were females and 12 were males.
5. 30 people thought the “Blinkit- Zomato” meme was situational/relative, out of which 11 were females and rest 19 were males.

6. 13 people thought the "Blinkit- Zomato" meme was unexpected/ surprising, out of which 6 were females and rest 7 were males.

Table 21- Blinkit-Zomato * Gender Chi-Square Test

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.999[a]	5	.416
Likelihood Ratio	5.127	5	.401
N of Valid Cases	101		

a. 2 cells (16.7%) have expected count less than 5. The minimum expected count is 2.28.

The Pearson Chi-Square significance value is 0.416 which is greater than **α**(0.05). Thus we fail to reject the null hypothesis and conclude that there is no significant relationship between gender and ""Blinkit- Zomato" meme.

4.3 One-way Anova

Objective: To identify the perception of different age groups wrt factors influencing the forwarding of memes.

Justification: Factors influencing the forwarding of memes are on interval scale and age groups are on nominal scale with more than 2 options, so we can use One-Way ANOVA to solve the above objective.

Data Analysis:

Assumptions

H0: Factors influencing the forwarding of memes is independent of age groups

H1: Factors influencing the forwarding of memes is dependent of age groups

Table 22- Anova Table

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Content	Between Groups	4.350	1	4.350	4.047	.047
	Within Groups	106.422	99	1.075		
	Total	110.772	100			
Define	Between Groups	.521	1	.521	.443	.507
	Within Groups	116.430	99	1.176		
	Total	116.950	100			
Awareness	Between Groups	3.151	1	3.151	3.260	.074
	Within Groups	95.681	99	.966		
	Total	98.832	100			
Life Updates	Between Groups	1.367	1	1.367	1.247	.267
	Within Groups	108.494	99	1.096		
	Total	109.861	100			
Perosnal Benefits	Between Groups	.307	1	.307	.164	.687
	Within Groups	185.554	99	1.874		
	Total	185.861	100			
Humour/Relatability	Between Groups	2.634	1	2.634	1.383	.242
	Within Groups	188.535	99	1.904		
	Total	191.168	100			

Interpretation:

From the above table it is observed that at 5% level of significance, the p-value (0.047) of content is less than α(0.05) so we reject H0 . So we can say that there is a difference in the perception of different age groups wrt content.

Further, to identify in which groups the difference exist, we will apply 2 Independent Sample T- Test between higher age group and lower age group.

Table 23- Independent Sample Test-Table

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Content	Equal variances assumed	.570	.452	-2.012	99	.047	-.641	.319	-1.274	-.009
	Equal variances not assumed			-1.632	12.772	.127	-.641	.393	-1.492	.209

Age Group	Hypothesis	P-value	Decision
Higher age group and Lower age group	H0: μ HG = μ LG H1: μ HG ≠ μ LG	0.047	**p ≤ α** **reject H0**

there is a difference in the perception between both the age groups, so further to identify whose perception is better among these 2 groups we will refer the group statistics.

Table 24- Group Statistics

Group Statistics					
	Age recorded new	N	Mean	Std. Deviation	Std. Error Mean
Content	Lower Age Group	89	1.78	.997	.106
	Higher Age Group	12	2.42	1.311	.379

From the group statistics, we can see that lower age group are more likely to be influenced by content as a factor while forwarding a meme.

4.4 Correlation

4.4.1 To determine the relationship between the Past(M) and Present(N) Likeliness of all the Memes

4.4.2 To determine the relationship within the group of Meme in Past case as well as Present case.

Correlations

	M1 Instagram Egg	M2 Girls like you	M3 Up cop	M4 Priyanka Wink	M5 Grumpy Cat	M6 Sonam gupta bewafa	M7 Pen Pinaple Apple	M8 Distracted Boyfriend	M9 Drake Meme	M10 Zomato Blinkit	N1 The Instagram Egg	N2 Girls Like you	N3 UP cop	N4 Priyanka Wink	N5 Grumpy Cat	N6 Sonam Gupta Bewafa	N7 Pen Pineapple Pen	N8 The Distracted Boyfriend	N9 Drake Meme	N10 Zomato Blinkit
M1 Instagram Egg	1																			
M2 Girls like you	0.402	1																		
M3 Up cop	0.264	0.135	1																	
M4 Priyanka Wink	0.302	0.296	0.377	1																
M5 Grumpy Cat	0.092	0.164	0.266	0.481	1															
M6 Sonam gupta bewafa	0.238	0.156	0.477	0.561	0.245	1														
M7 Pen Pinaple Apple	0.385	0.097	0.259	0.464	0.324	0.405	1													
M8 Distracted Boyfriend	0.119	0.042	0.384	0.440	0.218	0.378	0.381	1												
M9 Drake Meme	0.063	0.178	0.218	0.250	0.316	0.314	0.296	0.443	1											
M10 Zomato Blinkit	0.085	0.264	0.212	0.342	0.250	0.445	0.385	0.326	0.559	1										
N1 The Instagram Egg	0.665	0.363	0.171	0.363	0.081	0.286	0.381	0.031	-0.140	0.040	1									
N2 Girls Like you	0.329	0.577	0.092	0.344	0.111	0.167	0.216	0.133	0.097	0.090	0.554	1								
N3 UP cop	0.274	0.199	0.454	0.363	0.150	0.334	0.278	0.201	0.030	0.064	0.540	0.500	1							
N4 Priyanka Wink	0.368	0.253	0.321	0.436	0.226	0.422	0.297	0.053	-0.044	0.163	0.627	0.465	0.587	1						
N5 Grumpy Cat	0.035	0.235	0.282	0.289	0.458	0.341	0.239	0.063	0.319	0.328	0.219	0.352	0.452	0.483	1					
N6 Sonam Gupta Bewafa	0.252	0.151	0.256	0.367	0.074	0.567	0.254	0.146	0.011	0.293	0.497	0.386	0.611	0.704	0.542	1				
N7 Pen Pineapple Pen	0.519	0.166	0.209	0.326	0.074	0.255	0.559	0.072	-0.037	0.128	0.747	0.458	0.553	0.614	0.353	0.575	1			
N8 The Distracted Boyfriend	0.180	0.167	0.193	0.275	0.175	0.231	0.365	0.359	0.206	0.188	0.437	0.486	0.485	0.398	0.419	0.392	0.534	1		
N9 Drake Meme	0.159	0.236	0.187	0.247	0.085	0.376	0.124	0.244	0.417	0.389	0.321	0.379	0.302	0.296	0.481	0.415	0.295	0.510	1	
N10 Zomato Blinkit	0.145	0.287	0.172	0.303	0.058	0.291	0.193	0.201	0.254	0.309	0.387	0.499	0.406	0.441	0.465	0.456	0.376	0.581	0.620	1

Fig 8. Correlation Diagram

- The Past and Present Likeliness correlation is represented by the red(weak) to green(strong) colour gradient of the complete meme set.

  We see that M1 (Past_ Instagram Egg) and N1(Present_ Instagram Egg) has highest correlation, depicting that people like Instagram Egg meme irrespective of time. Similarly, M2-N2 (Past_ Girls Like You- Present_ Girls Like You), M1-N7 (Past_ Instagram Egg- Present_ Pen Pineapple Apple Pen), M6-N6 (Past_ Sonam Gupta Bewafaa- Present_ Sonam Gupta Bewafaa) and M7-N7 (Past_ Pen Pineapple Apple Pen- Present_ Pen Pineapple Apple Pen) have shown higher correlation than others.

We also see a negative correlation between M9 (Past_ Drake Meme) and N1 (Present_ Instagram Egg), which means that people who liked Drake meme in the past do not like Instagram Egg meme in the present.

- Within the Past case, correlation on one meme to another is represented by light blue(weak) to dark blue (strong) and white (neutral).

  We see that M4(Past_ The Priya Wink) and M6(Past_ Sonam Gupta Bewafaa) has high correlation, emphasizing that people who used to like "The Priya Wink" in the past also liked "Sonam Gupta Bewafaa" meme. Similarly, M3-M6 (Past_ UP Cop- Past_ Sonam Gupta Bewafaa) and M4-M5 (Past_ The Priya Wink-Past_ Grumpy Cat) have higher correlation.

- Within the Present case, correlation on one meme to another is represented by light orange (weak) to brown (strong) and white (neutral).

  We see that N1 (Present_ Instagram Egg) and N7 (Present_ Pen Pineapple Apple Pen) has highest correlation, emphasizing that people who like Instagram egg today also like Pen Pineapple Apple meme. Similarly, N4-N6(Present_ The Priya Wink- Present_ Sonam Gupta Bewafaa), N1-N4 (Present_ Instagram Egg- Present_ The Priya Wink), N9-N10 (Present_ Drake Meme- Present_ Zomato-Blinkit Meme), N3-N6 and (Present_ UP Cop- Present_ Sonam Gupta Bewafaa), N4-N7 (Present_ The Priya Wink- Present_ Pen Pineapple Apple Pen) has high correlation.

4.5 Preference of social platform usage

Using descriptive statistics, we get:

Table 25- Ranks Orders

Social Media Platform	1	2	3	4	5	6	7	8	Rank Order	Rank
WhatsApp	29	25	10	19	4	5	3	1	264	2
Facebook	0	29	19	13	12	11	9	10	436	4
Instagram	60	24	10	8	7	1	4	1	247	1
Snapchat	3	12	27	22	12	14	7	15	509	5
YouTube	6	7	23	14	29	10	7	3	423	3
Twitter	0	0	2	12	19	32	18	8	531	6
Quora	1	2	4	9	10	19	32	17	577	7
Reddit	2	2	6	4	8	9	21	46	649	8

Looking at the table we understand that the preference of using the following social platform is:

Rank 1 Instagram

Rank 2 WhatsApp

Rank 3 YouTube

Rank 4 Facebook

Rank 5 Snapchat

Rank 6 Twitter

Rank 7 Quora

Rank 8 Reddit

Chapter 5
Conclusion

5.1Findings

After analysis the data that was collected through the questionnaire floated, the following were the few key highlights from the research:

The highest number of respondents i.e. 47 aged between 23-25 years, followed by 42 respondents who aged between 18-22 years. The highest number of male respondents were from the age group of 23-25 years whereas in female respondents, the highest number of responses were received in the age group of 18-22 years.

Meme are mostly forwarded by people in the age group of 18-25 years. More memes are forwarded by females in the age group of 18-22 years, whereas for males, the highest number of respondents were in the age group of 23-25 years. People in this age group most forwarded memes twice or thrice a day. Also, Highest number of memes are forwarded by both males and females in the age group of 23-25 years.

People who usually spend 1-5 hours daily on social media tend to forward memes twice or thrice a day. Also, people who aren't active on social media either do not forward a meme or forwards meme once a week. Also, people who aren't active on social media either do not forward a meme or forwards meme once a week.

Females in the age group of 18-22 years spend more time on social media than males. Whereas, more males in the age group of 23-25 spend time on social media. Highest number of females and males in the age group of 23-25 years spend around 1-2 hours daily on social media. Females in the age group of 18-22 spends at least 1 hour daily on social media and it is usually 1-5 hours daily. People who are 29 years or above spends only 1-2 hours daily or even less than an hour a day.

Photo infographics, images, memes or illustrations were the highest type of shared internet content on social media whereas, the least form of content shared by respondents is deals or offers on competitions followed by personal recommendations (e.g., reviews).

On coming across a meme on any social media platform, respondents usually view and react to it for interaction. Only a few people create memes. Mostly respondents use memes to share it to their friends and family and these memes are usually used as a reference. Also, analysing the ranking preference of social media platforms it can be concluded that Instagram, WhatsApp and YouTube are the most preferred site for sharing online content.

Respondents in the lower age group i.e. people in the age group of 18-22 and 23-25 were more likely to be influenced by content as a factor while forwarding a meme.

It was also observed that there is no relationship or any significant association between gender and any of the category or type of memes that had been researched on. Based on the responses received the memes can be categorised as the following:

1. The Instagram Egg meme - Evergreen
2. "Girls like you" Lip Sync of Father-Daughter duo - Evergreen
3. UP cop - Thain Thain - Evergreen
4. The Priva Wink - Evergreen
5. The Grumpy Cat - Evergreen
6. Sonam Gupta Bewafaa – Situational/ Relative
7. Pen Pineapple Apple Pen- Situational/ Relative and also Non-sensical
8. The Distracted Boyfriend - Evergreen
9. Drake - Evergreen
10. Blinkit-Zomato Meme - Situational/ Relative

Mostly all the memes were categorized as “evergreen”, “situational/ relative”. Only one meme was categorized as “non-sensical”.

Of all the Memes that were shown to the respondents the Instagram Egg, Girls Like You, Pen Pineapple Apple Pen and Sonam Gupta Bewafaa have the highest correlation. Similarly, memes like Sonam Gupta Bewafaa , Priya Wink, UP Cop- Thain Thain and The Grumpy Cat has the highest correlation within the past case. Whereas, Instagram Egg, Pen Pineapple Apple Pen, Sonam Gupta Bewafaa , Priya Wink and Zomato- Blinkit meme has highest correlation in the present case.

5.2 Thoughts

The research helps to conclude that at present the most used form of social media is Instagram, Facebook and WhatsApp. Respondents in the age group of 18-25 years spend the most time on various social media platform to view, react and share various type of online content. Also these people mostly share or forward photo infographics, images, memes or illustrations. The defining variables that mostly affects the shareability amongst these respondents are "content" and "humour/ relatability".

The research shows that memes that were categorized as "evergreen" or "non-sensical" had the highest level of correlation amongst them and across time. This supports the Darwin's Big Idea theory of Internet meme characteristics. In regard to this theory we can strongly say that the Memes that had high level of fidelity or originality for example, Instagram Egg, Girl Like You Lip Sync of father-daughter duo, Pen Pineapple Apple Pen and Sonam Gupta Bewafaa memes shows sign of longevity as well.

Also, this study can be used a blueprint for marketers and brand managers working to create meme-based marketing campaigns. The content-related factors show that people usually share photo infographic, memes or images which means that marketers or brand managers should make use of various memes and pictures in order to efficiently conduct meme-marketing campaign. Also, as mostly memes are shared, view and reacted by people in the age group of 18-25 years old who spend the most time on social media platforms, marketers should keep in mind to keep content while targeting this particular age group. Additionally, the marketers or brand managers should try to make memes which can be categorized in the "evergreen" or "non-sensical" category as those are the type of memes which are loved and shared by the audience irrespective of time.

Hence, for an Internet meme to go viral we need, a basic categorization requirement that can be either of Evergreen or Non-sensical having characteristic of fidelity which is to be targeted to both the genders that are present in the age group of 18-25 years using the top three social media platforms which are Instagram, WhatsApp and YouTube.

Chapter 6
Limitations

The findings of the research aim to get an insight into consumers' perception of a Meme and their way of engaging with them. The focus is laid on the motives and effect of people's meme forwarding behaviour. The paper is restricted to measure constructs like usage, longetivity and shareability only, the study could also be extended to include other constructs such as relevance, virality, humour, recognizability, etc. The study has a limited sample size of 101 which may not be representative of the entire population and could limit the extent to which the study's results can be generalized. The study is targeting millennials foremost, since the author assumed that this age group would be best represented in the online questionnaire which can again limit the extent to which the study's results can be generalized. The study is also constricted to the memes present in the time period between 2013-2023, this could limit the scope and depth of the research.

Chapter 7

Scope of Future Research

Possible direction for future research are as follows:

1. Cross-cultural analysis: While internet memes have become a global phenomenon, they often vary in content, format, and popularity across different cultures and societies. Future research could explore the cross-cultural differences in the evolution and impact of memes, and investigate how cultural factors shape audience behavior and engagement.

2. Long-term analysis: As the lifespan of internet memes can vary from a few days to several years, it is important to investigate their long-term impact on audience behavior and engagement. Future research could use longitudinal data to track the evolution and impact of memes over time, and examine how they influence the formation and change of social norms, attitudes, and beliefs.

3. Memetic networks and social influence: Internet memes often spread through social networks and are influenced by various online communities, influencers, and algorithms. Future research could use network analysis and social influence models to investigate the structure and dynamics of memetic networks, and examine how they shape the evolution and impact of memes on audience behavior and engagement.

4. Memes and public health: As memes can also be used to convey health-related information and messages, future research could explore their potential as a tool for health communication and behavior change. This could involve investigating the effectiveness of memes in promoting healthy behaviors, reducing stigmatization, and increasing awareness of public health issues.

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Appendix 1

Research Questionnaire

MEMES

Your thought process behind memes that were trendy

* Required

1. Name *

2. Age *

Mark only one oval.

- ◯ 18-22
- ◯ 23-25
- ◯ 26-29
- ◯ Above 29

3. Gender *

Mark only one oval.

- ◯ Female
- ◯ Male
- ◯ Other:

4. How frequently do you use social media? *

Mark only one oval.

- ◯ Not active at all
- ◯ Less than an hour a day
- ◯ 1-2 hours daily
- ◯ 3-5 hours daily
- ◯ More than 5 hours

5. Rank the websites according to their use and preference. *

Mark only one oval per row.

	Instagram	Facebook	Snapchat	Whatsapp	YouTube	Twitter	Quora	Reddit
Rank 1	◯	◯	◯	◯	◯	◯	◯	◯
Rank 2	◯	◯	◯	◯	◯	◯	◯	◯
Rank 3	◯	◯	◯	◯	◯	◯	◯	◯
Rank 4	◯	◯	◯	◯	◯	◯	◯	◯
Rank 5	◯	◯	◯	◯	◯	◯	◯	◯
Rank 6	◯	◯	◯	◯	◯	◯	◯	◯
Rank 7	◯	◯	◯	◯	◯	◯	◯	◯
Rank 8	◯	◯	◯	◯	◯	◯	◯	◯

6. How do you interact with a meme? *

Check all that apply.

- ☐ View
- ☐ React
- ☐ Save
- ☐ Search
- ☐ Filter
- ☐ Create

7. How do you use memes? *

Check all that apply.

- [ ] use as a reference
- [ ] Share memes to friends or family
- [ ] Alter it
- [ ] use it in conversations
- [ ] for marketing a brand/person/product
- [ ] Other: _____

8. What types of internet content do you typically share on social media? *

Check all that apply.

- [ ] News, Articles or blogs
- [ ] Audios
- [ ] Status Update
- [ ] Photos, infographics, images, memes or illustrations
- [ ] Plans for future activities (e.g. Trips, plans, going on holidays)
- [ ] Opinions (e.g.. Political, social or cultural)
- [ ] Videos
- [ ] Personal recommendations (e.g. Reviews)
- [ ] Deals or Offers or Competitions

9. How frequently do you forward memes on social media? *

Mark only one oval.

- ◯ I exist to forward memes
- ◯ Twice or thrice a day
- ◯ Atleast once a day
- ◯ Once a week
- ◯ I Don't forward memes

10. Which of the following factors makes you most likely to forward a meme? *

Mark only one oval per row.

	Very likely	Likely	Neutral	Unlikely	Very unlikely
Share important or interesting things	◯	◯	◯	◯	◯
Define yourself to others	◯	◯	◯	◯	◯
Spend awareness about a certain topic	◯	◯	◯	◯	◯
Keep your friends updated about you	◯	◯	◯	◯	◯
Get benefits for yourself (e.g. like and share for a chance to win)	◯	◯	◯	◯	◯
Highlight the humour or relatability of the content	◯	◯	◯	◯	◯

11. Please look at the subsequent memes for the following question:

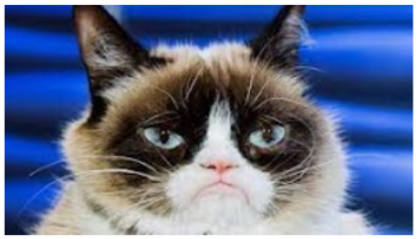
Check all that apply.

☐ The Instagram EGG

☐ Girls like you lip sync of father and daughter

☐ UP COP- "Thain Thain" meme

☐ The Priyanka Wink



☐ The Grumpy Cat

☐ Sonam Gupta Bewafa

☐ Pen pineapple apple pen

☐ The Distracted Boyfriend

☐ Drake Meme

☐ Blinkit-Zomato

12. What's the likelihood that you shared the meme across? *

Mark only one oval per row.

	Very likely	Likely	Neutral	Unlikely	Very unlikely
The Instagram Egg					
"Girls like you" Lip Sync of Father-Daughter duo					
UP cop - Thain Thain					
The Priva Wink					
The Grumpy Cat					
Sonam Gupta Bewafaa					
Pen Pineapple Apple Pen					
The Distracted Boyfriend					
Drake Meme					
Blinkit-Zomato Meme					

13. What's the likelihood that you would forward the meme today? *

Mark only one oval per row.

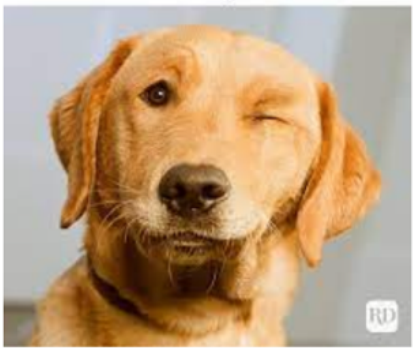
	Very likely	Likely	Neutral	Unlikely	Very unlikely
The Instagram Egg					
"Girls like you" Lip Sync of Father-Daughter duo					
UP cop - Thain Thain					
The Priva Wink					
The Grumpy Cat					
Sonam Gupta Bewafaa					
Pen Pineapple Apple Pen					
The Distracted Boyfriend					
Drake Meme					
Blinkit-Zomato Meme					

14. Please categories the meme according to your preference *

Mark only one oval per row.

	It was Situational/Relative	It was Evergreen	It was Controversial/Shocking	It was unexpected/ surprising	Challenged your views
The Instagram Egg					
"Girls like you" Lip Sync of Father-Daughter duo					
UP cop - Thain Thain					
The Priva Wink					
The Grumpy Cat					
Sonam Gupta Bewafaa					
Pen Pineapple Apple Pen					
The Distracted Boyfriend					
Drake Meme					
Blinkit-Zomato Meme					

You're awesome!
Thank you!



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