

# Comparative Study of Emojis and Filters for Enhancing Presence on Social Media

Sophia Surve<sup>1</sup>, Parveen Ladaf<sup>2</sup>, Neelam Naik<sup>3</sup>

<sup>1, 2, 3</sup> Dr. BMN College of Home Science, Matunga, Mumbai, India

**Abstract:** Social media provides online way of communication that allow users to participate, offer feedback, receive information and share ideas. Most of the young generation prefer to express their emotions online rather than face-to-face. There is change in communication style and language. Instead of plain text, many people prefer to use emoticons, emojis and filter applied self-images for expressing themselves. The objective of this study is to find out trending social media applications and to make a comparative study of effectiveness of emojis and filters for expressing effectively on social media which in turn results in growth of users. In this study, using survey-based research method, an attempt is made to find satisfaction level of the users who are using photo editing based mobile applications to edit and share their photographs.

**Keywords:** Social media, Filters, Emoticons, Emojis

## I. INTRODUCTION

The concept of Social media started in the late '90s with the emergence of a website called Six Degrees. The Internet platform allowed listing the contacts of friends, family members and colleagues, sending messages and defining the connection between the users in degrees. It is considered to be the first social networking in the form that one can perceive it nowadays. Even though the website did not last long (1997-2001), it gave birth by suggesting a breakthrough idea to all the popular and successful social platforms that are present today. [9] Social media is a group of online communication options that allow users to participate, offer feedback, receive information and share ideas. Currently Facebook, Twitter, LinkedIn, Pinterest and Google + are the top 5 most popular social media websites. With new users joining daily they are all predicted to continue to grow.

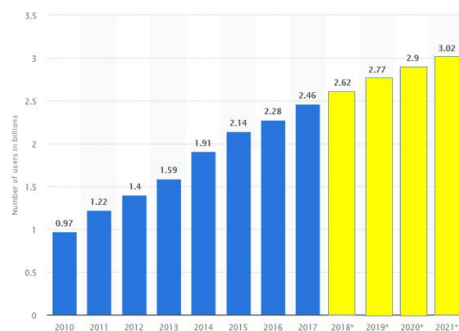


Fig. 1 Number of social media users worldwide from 2010 to 2021

This statistic shows the number of social media users worldwide from 2010 to 2016 with projections until 2021. In 2019, it is estimated that there will be around 2.77 billion social media users around the globe, up from 2.46 billion in 2017. The people love to talk about themselves. Humans devote about 30–40% of all speech to talking about themselves. But, on online social media that number jumps to about 80%. Talking face-to-face is messy and emotionally involved. In online communication, one has time to construct sentences and refine them. This is the way of superior self-presentation that is positioning oneself the way one want to be seen. The proper self-presentation increases person's self-esteem. The major studies indicate the drawbacks of social media. It is found that people communicate more often with family and friends because of technology, but the quality of that communication is becoming weaker and weaker day by day. It is also found that kids who spend more time engaging with a screen than with other kids or adults can struggle to understand emotions, create strong relationships or become more dependent on others. These kids have difficulties in connecting emotionally to people around them. Emails and texts lack the emotive qualities of face-to-face interaction. The social media communication can also be utilized for better purpose. Sentiment Analysis is the process of identifying and categorizing opinions expressed in a piece of text, especially in order to determine whether the writer's attitude towards a particular

topic or product is positive, negative, or neutral. By the use of Sentiment Analysis process, one can analyse the customer reviews available on thousands of websites.

## II. CHANGE IN COMMUNICATION AND MESSAGING STYLES

Conversation is one of the most important activities for humans, which help them to communicate their thoughts and feelings. For face-to-face conversation, humans use expression to indicate their emotion. [17] The social media has evolved the way people communicate with each other. The emoticons, emojis and edited selfie pictures have become part of any social media communication.

### A. Emoticons and Emojis

An emoticon is a typographic display of a facial representation, used to convey emotion in a text-only medium. Emoticons are representations of body language in text-based messages, where the communication channel is limited to transmission of letters and punctuation marks. It is not certain when the first emoticon in the history was used, however, different sources point to many interesting discoveries. The oldest known reference is to Abraham Lincoln’s speech from 1862, where he used a mark looking like a smiley face “;).” Although there is some doubt on whether it is a deliberately used emoticon, or a typo, the mark is used in a humorous context (after a short annotation ‘applause and laughter’), which supports the emoticon.

To send this:	Type this:		
Smile	:-) or :)	Open-mouthed	:-D or :d
Surprised	:-O or :o	Tongue out	:-P or :p
Wink	;-) or ;)	Sad	:-( or :(
Confused	:-S or :s	Disappointed	:-  or :
Crying	:’(	Embarrassed	:-\$ or :\$
Hot	(H) or (h)	Angry	:-@ or :@
Angel	(A) or (a)	Devil	(6)
Don't tell anyone	:-#	Baring teeth	8o
Nerd	8-	Sarcastic	^o)
Secret telling	:-*	Sick	+o(
I don't know	:^)	Thinking	*-)
Party	<:o)	Eye-rolling	8-)

Fig. 2 Emoticons and corresponding Emojis [8]

Under conversation scenarios, emoji is widely used to express humans’ feelings, which greatly enriches the representation of plain text. The advantages of use of Emoji in communication is that it is less time consuming, allows to exact expressing of feelings. It facilitates easy and fast communication for any age group person. Both emoticons and emojis are recognized and processed by the brain as nonverbal information, which mean one reads them as emotional communication symbols, not words. An emotional communication can just as important as words in conveying a message clearly. In spoken communication, researchers now know that if speakers aren’t allowed to use gestures, they become less fluent. Essentially, emojis are doing what the tone of voice does on the telephone and what expressions and gestures do in face-to-face communication. There’s even evidence that emojis are actually shifting the vocabulary.

### B. Selfie And its Decoration

Oxford English Dictionary had described “Selfie” as word of the year in 2013. A selfie is a photograph that one has taken of oneself, typically one taken with a smartphone or webcam and shared via social media. By considering psychological perspective, the taking of selfies is a self-oriented action that allows users to establish their individuality and self-importance; it is also associated with personality traits such as narcissism. Over a period of time, technological advancement has given new addiction disorders. Last two decades were known for computer addiction disorder and internet addiction disorders. Smartphone has intruded in daily and they are equipped with high resolution camera, called it as “selfie” camera. [4] American Psychiatric Association actually confirmed that taking selfies is a mental disorder, going as far as to term the condition “selfitis”. The APA has defined it as the obsessive-compulsive desire to take photos of one’s self and post them on social media as a way to make up for the lack of self-esteem and to fill a gap in intimacy, and has categorized it into three levels: borderline, acute, and chronic. If one finds oneself taking up to three selfies a day but not posting them on social media, consider yourself borderline. If person is posting at least three images of himself or herself a day, then that is considered to be acute. If a person is experiencing an uncontrollable urge to take and post up to six photos a day, then such person is termed as chronic selfitis. [7] The selfitis, further divided into various categories according to the

purpose of the taking selfie. These are environmental enhancement (taking selfies in specific locations to feel good and show off to others), social competition (taking selfies to get more 'likes' on social media), attention-seeking (taking selfies to gain attention from others), mood modification (taking selfies to feel better), self-confidence (taking selfies to feel more positive about oneself), and subjective conformity (taking selfies to fit in with one's social group and peers). Emojis are icon based while filter are customized graphical forms. Faces of individual person are modified using filters. In general people apply various filters to the selfies for changing moods in photograph, for Self-entertainment, for Beautification of self-image by applying features (animals/trees/sounds) available in filter apps. It is also coupled with posting the selfie photographs on social networking sites and wait for comments of friends and others. This has led to chain of reactions leading to a complex addiction disorder which can be called as Selfie addiction disorder. [2][6] [12]

### III.OBJECTIVES OF THE STUDY

#### A. Following are the Objectives of The Current Study

To study the trending social media applications

To make a comparative study of effectiveness of emojis and filters to express oneself on social media which in turn results in growth of users

To study satisfaction level of the users who are using photo editing based mobile applications to edit and share their snaps

### IV.LITERATURE REVIEW

In this paper, for the problem of emoji classification and embedding learning in conversation scenarios, we propose a matching approach and deeply analyse its performance through both qualitative and quantitative experiments. Empirical results demonstrate our approach better than traditional softmax classifiers in terms of different metrics, and the embeddings trained from our neural networks could also represent the emoji well. [17] It has been argued that the communication of emotions is more difficult in computer-mediated communication (CMC) than in face-to-face (F2F) communication. The aim of this paper is to review the empirical evidence in order to gain insight in whether emotions are communicated differently in these different modes of communication. [3] Emojis attempt to enhance nonverbal limitations in text messaging. The paper experimentally tests and quantitatively measures how emoji usage in decision making. [1] This research examines the influence of paralinguistic cues on the consumers perception of the companies' quality of the response to an online consumer review, brand relationship, purchase intent. It also studies the usage of emojis in marketing and advertising. [10] The use of electronically mediated communication (EMC) can be challenging in educational contexts; as it tends to rely heavily on text-based formats, meaning and intent may be lost in translation from thought to posted message. This study presents a review of the literature on emoticons used in support of online learning, with the goal of improving future practice and research of online teaching and learning, and then provide some specific instructional recommendations for online educators. [11] This paper focuses on people's motives in using four types of emojis: positive, neutral, negative, and non-facial. It compares the willingness levels of using these emoji types for seven typical intentions that people usually apply as nonverbal cues in communication. It also studies the sentiment effects of emojis, as well as their duplications, on verbal messages. [16] This paper introduces the shift of focus in communication towards Emojis to enrich the written form of communication and discusses when and how the emojis have evolved as part of communication. [15] Emoji is a new language in social media to colour and humanise their text messages as a part of Human-Computer Interaction. To understand how emoji work and how they affect people's daily lives, a review has been conducted. This study tries to provide a clear understanding of how and why designers and HCI experts need to evaluate emoji, as well as their implications and limitations. [14] Authors explore the emoji usage through a gender lens and perform the multi-dimensional statistical analysis from various aspects of emoji usage, including the frequency, preferences, input patterns, temporal patterns, and sentiment patterns. [18] This paper explores the role of emoji and emoticon usage on interpersonal communication. It also discusses the role of emoji and emoticons to enhance the text message's meaning. [13] This paper studies children and young people's use of social media and effects on their wellbeing. It also identifies and respond to the challenges and opportunities of children and young people face during social media use. [5]

### V. EXPERIMENT CONDUCTED AND RESULTS

The primary data is collected through survey. The sample size is 80, including all gender people from age group 10 and above. The secondary data is collected from surveys published online. Around 53% female and around 58% male population prefer to use What's App as social media as shown in figure 3(a). The FaceBook is preferred next as social media. The female prefers social media to be make themselves aware of new technologies and their benefits as shown in figure 3(b). The male prefers a particular social media because they can easily and fast upload or post the information or photographs they want to publicize. Both gender

people prefer particular social media because of the features available in it. As shown in figure 4(a) chatting is the most preferred thing on social media. Then people prefer to refer news feed. As shown in figure 4(b), around 80% female and 60% male surveyed apply filters to the selfie taken. Majority of the people prefer to post selfies on social media during leisure. Around 60% of the sample surveyed, check the likes given to their selfies when they get free time. Around 35% people use social media for around 1-2 hours daily. As shown in figure 5(a), round 77% female and 36% male prefer editing their snaps for the beautification purpose. Sometimes they apply special editing features to their photographs to look funny. Most of the females apply flower crown as the filter for the beautification of their snaps.

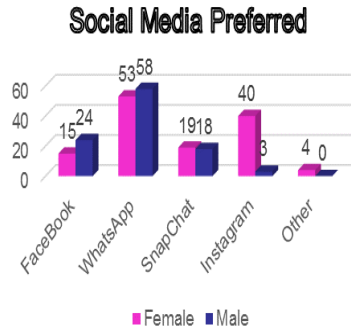
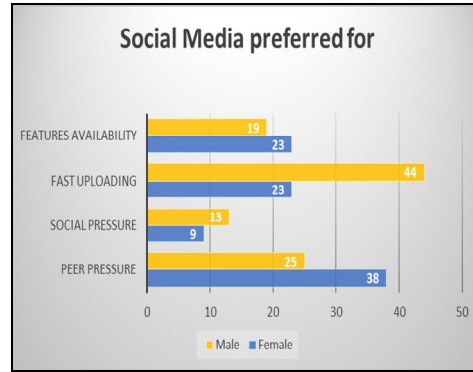


Fig. 3 (a) Social Media Preferred



(b) Social media preferred for

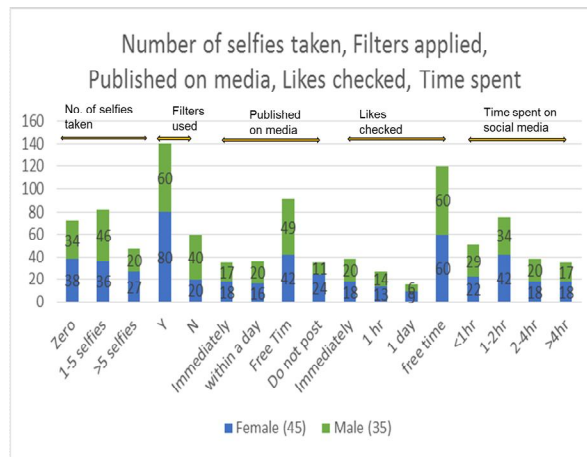
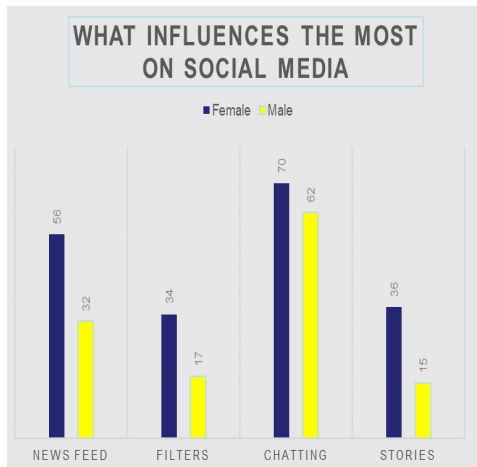


Fig. 4 (a) The most influencing thing on social media (b) Number of selfies taken and their likes checked

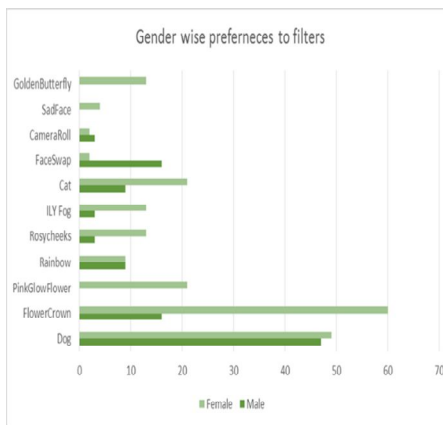
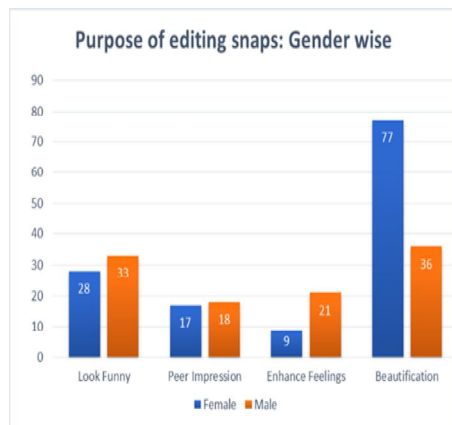


Fig. 5 (a) The purpose of editing Snaps (b) Gender-wise preferences to filters

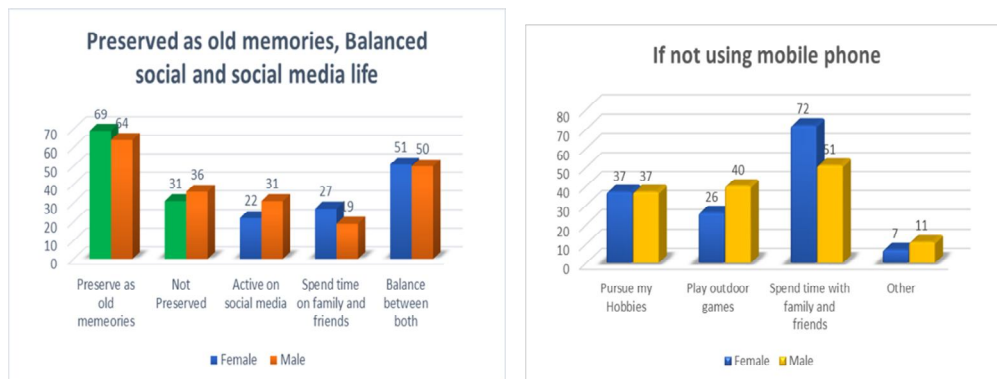


Fig. 6 (a) Snaps stored as old memories (b) Preference for the work when starved from mobile use

As shown in figure 5(b), dog filter is equally preferred by all gender people to make selfie funny. As shown in figure 6(a), around 69% female and 64% male preserve their snaps as old memories on social media. Around 50% people balance their social and real life. Around 72% female and 51% male would prefer to spend time with their family and friends if they are starved to use smart phone because of any reason. Around 37% population will prefer to pursue their hobbies in such case. This is shown in figure 6(b).

## VI. CONCLUSION

Even though this study has thrown little light on use of social media and its purpose specifically for new generation, a lot of research is required for the same to judge how it affects large population of the world. The Sentiment Analysis process, one can analyse the customer reviews available on thousands of websites. The psychology behind social media usage can be used to bring customers closer, give them more of what they want, and create better relationships. People are engaged on social media to represent them in a better way. But, from this study, it can be concluded that people should value to one-to-one interaction rather than dependency on social media and seeking approvals commentary from others for the posted text and snaps.

## VII. FUTURE ENHANCEMENT

Selfitis appears to be a condition that requires further research to fully assess the psychosocial impacts that the behaviour might have on the individual. This study can be further explored to find in-depth effect of computer-mediated social media communication over behaviour of the person. From the perspective of social media graphics developers, this field may give rise to more creative emojis and filters, which will in turn result in increase in employment. Further the sample size can be increased to get more accurate results.

## REFERENCES

- [1] Austin Jonathan Beattie, "Interpersonal Impressions of Emoji Use in Computer-Mediated Decision Making", Western Michigan University, 2017
- [2] Balakrishnan, J. & Griffiths, M.D. (2018). An exploratory study of 'selfitis' and the development of the Selfitis Behavior Scale. *International Journal of Mental Health and Addiction*, <https://doi.org/10.1007/s11469-017-9844-x>.
- [3] Daantje Derks a, Agneta H. Fischer b, Arjan E.R. Bos c, "The role of emotion in computer-mediated communication: A review", *Computers in Human Behavior*, Science Direct, 2007
- [4] Dr. Pankaj B. Shah, "Selfie- a New Generation Addiction Disorder-Literature Review and Updates", Department of Community Medicine, SRMC & RI. SRU, Chennai-116, India
- [5] Dr. Teresa Swist, Dr Philippa Collin, Ms Jane McCormack, "Social media and the wellbeing of children and young people: A literature review", The Commissioner for Children and Young People, Western Australia, July 2015
- [6] Gaddala, A., Hari Kumar, K. J., & Puspahalatha, C. (2017). A study on various effects of internet and selfie dependence among undergraduate medical students. *Journal of Contemporary Medicine and Dentistry*, 5(2), 29-32.
- [7] <http://www.lifehack.org/articles/communication/addiction-selfies-mental-disorder.html>
- [8] <https://imgur.com/gallery/AZCax>
- [9] Jan Franko Aleksandra Uzunova, "Social media marketing communication plan for Hauskafe Oy.", Haaga Helia, University of Applied Science
- [10] Jayme Hill, "The Impact of Emojis and Emoticons on Online Consumer Reviews, Perceived Company Response Quality, Brand Relationship, and Purchase Intent", Scholar Commons, University of South Florida, 2016
- [11] Joanna C. Dunlap, Devshikha Bose, Patrick R. Lowenthal, Cindy S. York, Michael Atkinson, Jim Murtagh, "What sunshine is to flowers: A literature review on the use of emoticons to support online learning", *Emotions, Design, Learning and Technology*. Elsevier, 2015
- [12] Kaur, S., & Vig, D. (2016). "Selfie and mental health issues: An overview", *Indian Journal of Health and Wellbeing*, 7(12), 1149
- [13] Sabrina Chairunnisa, Benedictus A.S, "Analysis of Emoji and Emoticon Usage in Interpersonal Communication of Blackberry Messenger and WhatsApp Application User", *International Journal of social sciences and management*, Vol. 4, Issue-2: 120-126, DOI: 10.3126/ijssm.v4i2.17173
- [14] Shatha Ali A Hakami, "The Importance of Understanding Emoji: An Investigative Study", University of Birmingham, School of Computer Science, 2017



- [15] Shreyasee Das, Madhavi Jha, Shourya Sarkar, Keerthana Sundaram, Dr.N. Gayathri, "Emojis: The Language of the future? – A Literature Review", International Journal of Humanities and Social Sciences. ISSN 2250-3226 Volume 7, Number 2 (2017), pp. 135-139 © Research India Publications
- [16] Tianran Hu, Han Guo, Hao Sun, Thuy-vy Thi Nguyen, Jiebo Luo, "Spice up Your Chat: The Intentions and Sentiment Effects of Using Emojis", University of Rochester, March 2017
- [17] Xiang Li, Rui Yan, Ming Zhang, "Joint Emoji Classification and Embedding Learning", School of EECS, Peking University, China
- [18] Zhenpeng Chen, Xuan Lu, Sheng Shen, Wei Ai, Xuanzhe Liu, Qiaozhu Mei, "Through a Gender Lens: An Empirical Study of Emoji Usage over Large-Scale Android Users", May 2017