

PSYCHO EMOTIONAL IMPACT OF SOCIAL MEDIA EMOJIS

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ABSTRACT

OBJECTIVE: To evaluate the “potential psycho-emotional impacts of digital emojis on instant messaging applications users.”

STUDY DESIGN: Survey research.

PLACE & DURATION: Public and private work and educational institutions of Rawalpindi Islamabad, from 1st March to 10th August 2016.

METHODOLOGY: A questionnaire pertaining to psychological dependence related to the usage of emojis was designed. A total of 97 individuals participated in the survey, randomly selected from the work and educational institutes of Rawalpindi Islamabad, after applying inclusion and exclusion criteria. Percentage response of the participants to the questionnaire was compared. Chi square test was applied to analyze the association of time, gender, and age to the participants' response.

RESULTS: Ninety percent of the participants rated emoji message more meaningful as compared to traditional texting. Forty-two percent considered emojis as strong, 17.5% as a very strong measure for emotion expression. Reflecting the psycho emotional dependency on emojis, 46% reported moderate, 21% strong and 18.5 very strong effects of mere presence or absence of emojis in digital messages. On missing an expected emoji from a sender, 47% claimed to suffer moderate level of negative mood effects while 6% reported very strong level of negative effect. Most of assessed responses in the study were independent of age, time spent on digital messaging and gender influence. However, emojis effectiveness for emotion expression, specific emoji expectation, and mood swings by usage or non usage of emojis revealed significant association to age, gender or duration of usage on chi square test.

CONCLUSION: Digital emojis can render adverse psycho emotional effects on the users.

KEY WORDS: Emoji, Digital, Psycho Emotional.

INTRODUCTION

Social media networking has encompassed the community like an epidemic. Rising trends of messenger services and all that is available at the fingertips (operating on smart phones) of the community, has risen the intercommunication to a vulnerable level.

According to a survey by Andrew Perrin “Social Media Usage: 2005-2015”, ninety percent of young adults were using social media in 2015, as compared to 12% in 2005. This shows a 78% increase in usage. Moreover, there has been a 69-point rise among those ranging in ages from 30-49, rating as 8% in 2005 to 77% today¹.

With the advancement of digital communication and instant messaging applications, use of emoticons and emojis has also gained popularity.

An emoticon, is shorthand or graphic representations of a facial expression² allowing the user to express feelings or emotions,

and initiate a written message with non-verbal factors.

Emojis, on the other hand, are a step further. They are graphic symbol, that portray not only facial expressions, but also concepts and ideas. They can represent celebration, weather, food and drink, and also emotions, feelings, and activities. These “picture characters” or pictographs (emojis) are commonly used in smartphone texting and social media sharing³ and have become extremely popular worldwide⁴.

History of emojis date back to 1998, when Kurita took inspiration from weather forecasts symbols. He created the first 180 emojis based on the live expressions exhibited by people and other things that he observed in the city⁵. The vast usage, popularity and significance of emoji communication can be judged by the fact that Oxford Dictionaries, global leader in language, have instead of choosing a traditional word, chosen an emoji, ('Face with Tears of Joy') as the word of the year-2015⁶.

Casper Grathwohl, President of Oxford Dictionaries, has rated emojis as flexible, immediate and rich form of communication, that transcends linguistic borders⁷.

Emojis have revolutionized the way we communicate. Today we tend to use emoji to describe our feelings instead of using actual words. Emojis have become a universal language. Researchers have indicated that not only for its ease of usage and richness in meaning, emojis are also adopted in digital communications because they serve as socio-emotional providers⁸.

The extensive daily usage, strength as a silent communication tool, and potential to manipulate emotional aspects of the consumer has led to the necessity of evaluating psycho emotional impacts of emojis on its users. Therefore, this questionnaire survey was designed with an objective to assess the potential psycho emotional effects of digital emojis on instant messaging application users.

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METHODOLOGY

A survey research was conducted in the public and private work and educational institutes of Rawalpindi -Islamabad, from 1st March to 10th August 2016. A questionnaire was designed with a brief biodata, including age, gender, education in years, and occupation, followed by ten questions defining mood elements, message interpretations, emotional impacts and psychological dependence related to the usage of emoji in electronic messaging during daily personal intercommunications. The questionnaire, comprised of both open and closed ended questions and was distributed in the local schools, universities, government and private organizations. After applying inclusion and exclusion criteria a total of 97 participants were randomly selected for the study. All the subjects were briefed about the questions, asked for participation consent, and interviewed regarding their usage or non-usage of emoji, time consumed on e-messaging, and their most frequent emoji recipient. Individuals who were not using emojis; whose time consumption for e-messaging was less than one-hour daily; age was less than 15; or education less than 10 years, or whose frequent emoji recipient were professional contacts only, were excluded from the study.

Those who were above 15 years, user of emoji in e-communications with daily consumption time of more than one hour, whose frequent recipients were either blood or cordial relations were included in the study.

The participants were inquired ten questions, with either a YES/NO or a Likert scaling response. All the data was recorded in SPSS version 24 software and descriptive analysis was done calculating respective valid percentage response of the participant pertaining to different questions.

Chi square test was done to analyze the difference in response based on gender, age and time spent on e-messaging. A p value of 0.05 was taken as significant.

RESULTS

Results of this study are summarized in Table –I.

Out of a total of 97 participants, there were 48 females, and 49 males. Thirty- nine percent were e- messaging daily for more than an hour, 17% more than 02 hours, 24% up to five hours, and 19% more than five hours on different social media applications. Of the total participants 19% were most frequently exchanging emojis with their blood relations while 81% with cordial

TABLE - I: VALID PERCENTAGE RESPONSE (n = 97)

Age range: 15 & above years

Number of female participants= 48 (49.5 %)

Number of male participants=49 (50.5 %)

Question 1 - Average time spent on Digital messaging			
1-2 hours	More than 02 hours	Up to 5 hours	More than 05 hours
39%(n = 36)	17% (n=16)	24% (n=22)	19% (n=18)
Question 2 – Which message is more impactful in its meaning, one with an emoji or the one without it?			
With emoji		Without emoji	
90% (n =87)		10% (n=10)	
Question 3 – Which relation do you frequently send emojis in your E- messages?			
Blood relations		Cordial relations	
19% (n=17)		81% (n=71)	

relations. Ninety percent of the total participants rated emoji message more impactful in its meanings as compared to 10% who considered it no better than the traditional messaging. Twenty-five percent of the users sent similar pattern of emojis to all their contacts, while 75% used selective emojis based on their relational ties. Regarding emojis effectiveness for emotional expressiveness, 4% considered it a weak measure, 36% as moderately effective measure, 42% as strong measure and 17.5% rated it as a very strong measure for emotion expression. On receiving an emoji, the message interpretation level of the participants ranged from 2% having no influence, to 8% having weak, 36% moderate, 35% strong, and 19% very strong influence. Sixty-two percent of the participants expected specific emojis from contacts while 38% had no such expectations from their contacts.

Regarding mood swings by receiving, or failing to receive any expected emoji from a regular contact, 15% reported mild mood effects, 46% moderate, 21% strong and 18.5 very strong effects (Figure - 1).

Elaborating the negative mood change on missing an expected emoji from a sender, 30% claimed to experience mild negativity, 47% moderate, 17% strong and 6% very strong level of negative effect. Interpreting progressive or abrupt cessation of specific regular emojis from a particular sender as an indicator of deteriorating relationship, appeared to be strongly justifiable to 20 % of the participants, moderately justifiable to 55% and weakly to 15.5% of the cases. Ten percent of the cases found this interpretation not justifiable at all (Figure - 2).

Chi square test revealed a statistically significant difference in response of different age groups regarding impact of emojis on e- messages, emoji effectiveness for emotion expression, and specific emoji expectation, with a p value of less than 0.05. Rest of the responses in the questionnaire are independent of age difference.

Also chi square test showed significant association of gender (p value < 0.05), regarding response difference in terms of emoji's effectiveness for emotional expression and mood swings by mere usage or non usage by a particular regular contact. Rest of the responses in the questionnaire were independent of gender difference.

On assessing the effect of time spent on e-messaging, no statistically significant difference was recorded in the responses of the participants except for the specific emoji expectation from any particular contact (p value < 0.05 on applying chi square test- Table 2).

Question 4- How do you scale the effectiveness of emojis for “Emotion” expression?				
Weak measure	Moderate measure		Strong measure	Very strong measure
4% (n=4)	36% (n=35)		42% (n=41)	17.5% (n=17)
Question 5 – How impactful do you scale the presence of emojis, while interpreting the messages that you receive?				
No impact	Weak impact	Moderate impact	Strong impact	Very strong
2% (n=2)	8%(n=8)	36%(n=35)	35% (n=34)	19% (n=18)
Question 6 – If you experience any mood change (good or bad) by just usage or non-usage of an emoji from a regular contact, how would you scale this mood change?				
Least	Moderate		Strong	Very strong
15% (n=12)	46%(n=37)		21%(n=17)	18.5%(n=15)
Question 7 – Do you expect a specific emoji from a person in your communication?				
Yes			No	
62% (n=60)			38%(n=37)	
Question 8 – If you experience a negative mood change failing to receive your expected emoji from a sender, how intense would you scale that mood change?				
Mild	Moderate		Strong	Very strong
30%(n=25)	47%(n=39)		17%(n=14)	6%(n=5)
Question 9 – If complete session or reduced frequency of emojis from a regular contact is interpreted as a sign of deteriorating relationship, how justified is this interpretation in your opinion?				
Not at all	Weakly		Moderately	Strongly
10% (n=10)	15.5%(n=15)		55%(n=53)	20%(n=19)
Question 10 – What is your choice pattern for emoji selection for your contacts?				
Similar for all			Selective based on relations	
25%(n=24)			75%(n=73)	

TABLE -II: ASSOCIATION OF SPECIFIC EMOJI EXPECTATION TO USERS' TIME SPENT ON INSTANT MESSAGING ANALYZED THROUGH CHI SQUARE TEST.

TIME	SPECIFIC EMOJI EXPECTATION		TOTAL	P VALUE
	YES	NO		
1-2 Hours	17	19	36	.02*
More than 02 hours	7	9	16	
Up to 5 hours	17	5	22	
More than 5 hours	14	4	18	
TOTAL	55	37	92	

*P value < .05 (Statistically Significant)

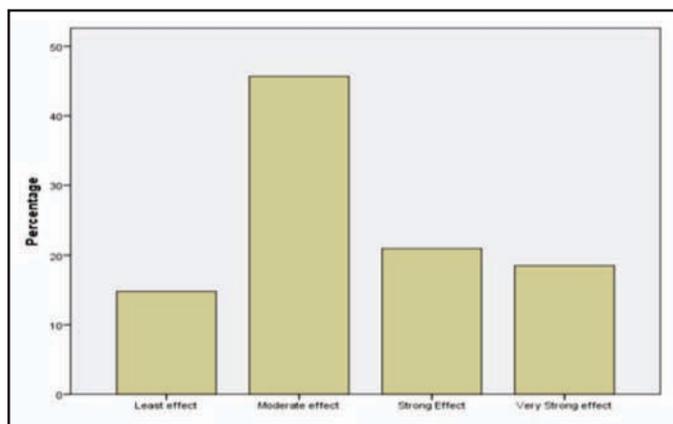


FIGURE-1: MOOD SWINGS BY ABSENCE OR PRESENCE OF SPECIFIC EMOJI FROM A PARTICULAR SENDER

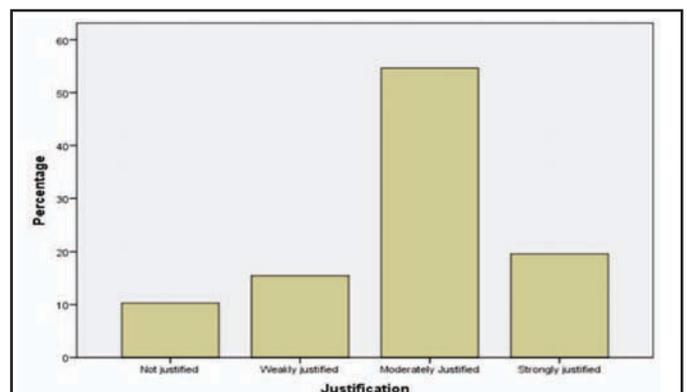


FIGURE-2: WITHDRAWAL OF A FREQUENT EMOJI FROM DIGITAL COMMUNICATION DEPICTS RELATIONAL ADVERSITY- JUSTIFICATION GRAPH

DISCUSSION

This project had an objective to survey the users of e- messaging facility of social media regarding the psycho-emotional effects (if any) of digital emojis. A set of questions, which assess the psychological impacts and emotional dependency & effects of emoji usage were designed and the valid response percentage calculated. The data obtained after the application of the statistical tests were interpreted in the light of the literature available from the previous studies.

Majority of the participants (90%) indicated an obvious importance of emojis in e- messaging, rating emoji associated messages more impact full in its meanings than the traditional one. This high percentage credits the emoji creator Kurita, who was influenced by real life expressions commonly used in daily conversation. First 180 emojis were created, based on the expressions that he observed people were making in the city⁵. This intentional simulation of the emojis to real life expressions made it more convenient and impact full than traditional message communication, a factor which is also reflected in response of the study participants regarding this question.

In the current survey selection and usage pattern of the emojis also reflect its utility and role in emotional, and cordial relationships. These digital figures are mostly used amongst cordial contact, with 81% of the evaluated cases using emoji messaging to friends, spouses, fiancés, and emotionally associated contacts. This high percentage figure points out the expected message content related to the usage of emoji regarding emotional communication.

Almost same inference can be drawn from the fact that majority of participants (42%) considered and used emojis as a strong marker of emotion expression. Whereas 36% rated it as moderately effective mean, 17.5 % thought it was a very strong mean of emotion expression. Also, the remaining 4% did not exclude emoji completely, considering it as a weak modality regarding emotional communication.

The art and science of emotion expression via face, voice and language has long been postulated by Charles Dawin in 1872 in his book "expression of emotion in man and animals"⁹.

The results of our study points out a likely possibility that the latest technology has added an expression modality of emotions- "emojis". In 2008, Derks et al. surveyed subjects' motivation for emoji use and they found that emoticons and emojis are mostly used to express emotion and to strengthen a message¹⁰.

Earlier scientists have reported that consumers with emoticons used them and were more satisfied with the system than those without emoticons. Thus it appeared as if users responded to emoticons and interpreted them as intended¹¹.

All these theories satisfy the results of this current, real-life survey. The importance of emojis in message interpretation can be viewed by the fact that in our survey 98 % of the participants acknowledged its significance in digital communication. Of these, only 8% considered it a weak, as compared to 90% rating it as moderate, strong, or very strong method for conveying wordless messages.

In fact scientists are pointing out the future perspective research regarding the interplay between the emojis and the

text. The position of an emoji, and its textual context acts as an amplifier and modifier of the meaning³.

Mood swings related to presence or absence of emojis was also strongly affirmed by the participants (Table - 1). The intensity of this mood swing was rated as strong or very strong by 23% of the participants. The results of our survey are in the same lines as reported by Petra et al in their emoji sentiment analysis report of 2015. In their study they analyzed the interplay of the human perception of tweets that are with or without emojis. On experimentation, the report summarizes that mere presence of emojis in social media messaging does has an impact on the human emotional perception³.

Similarly, a study in 2008 used structural equation modeling (SEM) analysis, to assess the potential effects of emoticons, specifically, on the relationships. Results suggested that emoticons directly and significantly affected enjoyment, and in turn personal interaction¹¹.

Further scientific studies also emphasize the influence of emojis on message interpretation reporting negative emojis could cause a negative effect and positive emoticons creating a positive effect in complex communications¹².

Taking a step ahead, our study analyzes the reaction of real life participants, on withdrawal of a previously received emoji from a sender. If an emoji brought pleasure or enjoyment to the receiver, could its cessation be interpreted as deteriorating relation between the ones it was exchanged? Ninety percent of the participants did respond in affirmation rating the inference as justifiable in a range of moderate to very strong.

Scientists argue that emoticons, not only affect the viewers in ways similar to facial expression but also trigger other unique effects⁹. Some of these unique effects as noticed in our survey are expectation development of specific emojis from sender, being selective while sending emojis (taking out time to choose), and weighing relational ties on consistency of emojis from the sender. Majority of the responses, in our study as well as in the literature review, incline towards moderate to intense emotional dependency on emojis. However, there are recorded elements in our survey who reacted in a milder way regarding emoji digital communication and its emotional influences. Today scientists are reviewing the biological mechanisms for emotions. Researchers are trying to answer compelling queries as: How do individuals experience life emotionally? How come people react so differently to same experiences? How health is influenced by emotional experiences in significant social relationships? Are there any basically similar emotions to all humans?¹⁴

Emoji are used alongside text in digital messaging, but their graphic meanings are open to the users' interpretation. Some people may interpret the nonverbal digital emoji differently than others. According to Psycholinguistic theory interpretation must be consistent between two individuals in order to avoid miscommunications³. However, the newly emerging emoji language is very vulnerable to non-consistency of message interpretation based on the personalities, emotional attachment levels, relational importance and many other behavioral factors interplaying between two individuals.

As interpreted by our results and in the light of previous studies too, the emotional reaction to digital emojis is rising with the

advancement of technology. These emotional dependencies if denied, or experience expectation failure, pertaining to emoji messages from contacts, can be felt stronger than verbal communications. The emoji usage of the community seems to bring vulnerability to psychological stress and trauma.

G Esther, in 1999 emphasized that a traumatic event or experience creates psychological trauma when it overwhelms the individual's ability to cope¹⁵. When we have difficulty in coping, stress occurs. Any situation that elicits an emotional response, either an actual experience or just a perceived one, can become a stressor. A situation that is stressful for one person may not be the same for another person¹⁶. Recent research has revealed that emotional trauma can result from trivial and common elements such as an auto accident, the breakup of a significant relationship, any humiliating or deeply disappointing experience¹⁷. These humiliating events (e.g. failure of expectation levels, withdrawals of previously exchanged emojis, as reflected in our study) that directly devalue an individual in a core role are strongly linked to risk for depressive episodes¹⁸.

As also reflected in our results, emotions exercise an intense force on human behavior. Strong emotions can drive an individual to take actions that are not normally performed, or avoid enjoyable circumstances. Emotionalism is linked with a wide range of psychological phenomena encompassing temperament, mood, and motivation¹⁹.

Scientists report that consequences of stress and psycho-emotional problems can range from being very personal to effecting the family and work environments²⁰ and can reach as severe as suicide. In this regards, attitude of different individuals who fall on the extreme poles of the responses seems to split the community in two categories. While availing digital communication, "casual users" on exchanging emojis with any "emotionally intense interpreter", may evoke un intentional psycho emotional trauma in the person. These factors may damage interpersonal relations triggering stress and depression.

The inclusion of only educated (10 years to above 16 years of education) individuals in the project still raises civilized opinion validity of the results. Education is one of the most important instruments that play their role in human development and behavior²¹. It is popular impression that education is associated with more liberal opinions on different issues and these civilized opinions attract and exercise due weightage from masses²². Therefore, the collective opinion of the participants of this study, which were an educated group of the society, still highlights the significance of the result.

CONCLUSION

Analyzing the participants' response of the current project, in the background of previous studies, it is concluded that social media emojis have a potential to cause stress and psychological trauma. It seems to be equally forceful as face to face verbal interactions with a disadvantage of more vulnerability of miscommunications. A more careful and cautious usage of this instant messaging advancement is recommended with due weightage to the hidden message possibilities.

LIMITATIONS AND RECOMMENDATIONS

A relatively smaller sample size of 97 individuals in our study can be elaborated in future studies. More sensitive and focused research is strongly recommended on this subject as it touches the community directly, and has the potential to cause stress, anxiety and depression. Keeping view, the heavy usage of this modality, generalized counselling for targeted groups can also be considered.

Contribution of Authors:

Dr. Nusrat Zareen: Study Designing, Manuscript Drafting, Literature Reviews, Financing.

Mis. Nosheen Karim: Idea Proposal, Data Collection & Analysis, Proof Reading.

Dr. Umar Ali Khan: Final Proof Reading

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