

An Analysis of the Use of Emojis in Digital Communication

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ABSTRACT

The current study aims to explore whether emojis render same meanings to all individuals. It also discusses different interpretations of whatsapp emojis results in miscommunication. Writing, pictograms, symbols, signs and other modes of communication when used collectively, reinforce each other to make communication more effective. Emojis, an advanced form of pictograms and one of the most used means of communication by new generation are graphical by nature and are open to interpretation. In this digitalized world, emojis are universally used by everyone to presents one's feelings and thought vibrantly. Quantitative research design was employed. A sample size of 100 learners from 2 public and 2 private universities was selected to get data through a closed ended questionnaire carrying 50 randomly selected emojis used in whatsapp having different meanings. Data were analyzed through SPSS software for interpretation of results by employing standard deviation, and independent sample t-test. It was concluded that different participants were of varied opinion about the same emojis. Difference in gender also affects the interpretation of meaning due to their own sub-cultures.

KEYWORDS

Emojis, Meaning, Communication, WhatsApp, Culture, Gender

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BACKGROUND OF THE STUDY

Social trends of communication are changing day by day either through technology or lifestyles. Frequent use of mobile phones opened up new doors for innovations in the communication process. Many messaging applications like; Whatsapp, Line, Instagram, WeChat, Snapchat, Facebook Messenger, etc. are in vogue and have made communication more effective and easy. Current research has addressed only WhatsApp users. The new generation is very keen and efficient in using Whatsapp to communicate with their peers, friends, family, and others. They use verbal and non-verbal communication tools; one of those is the use of Emojis. Guibon et al. (2016) has reported that 92% of the online population uses emojis in their messages. Emojis were created by Shigetaka Kurita in the late 90s. Unlike emoticons, they were not only meant to represent faces but concepts and objects too. Their popularity and frequent use among users have made them a part and parcel of digital communication.

Digital conversation operates through verbal signs whereas non-verbal signs are lost in digital communication as asserted by Tayebenik and Puteh (2012). Emojis, an English adaptation of Japanese word is used to add an affective tone to the text message and help to express emotional sentiments through pictures instead of non-verbal signs, as quoted by Lo (2008). Emojis act like affective filters for expressing messages on social applications. Tigwell and Flatla(2016) pointed out that Emojis can be misinterpreted due to users' interpretation and variable designs of Emojis. The point to ponder upon is whether the sender knows and understands the meaning of these emojis before using them. Do they use the appropriate emoji that intends to convey their feeling?

SUBJECTIVE INTERPRETATION OF MEANING

From semiotic point of view, Emojis are mere signs and possess a meaning which is always socially constructed. Barthes (2006) in Griffin's book entitled "A First Look at Communication Theory" avowed a sign to be a combination of its signifier and signified. He supported the sign theory of Ferdinand De Saussure who insisted the relationship of signifier and signified to be arbitrary. This arbitrary relationship makes Emojis open to variable interpretations which are not standardized but can be used as a simple notifier. This relation can be easily shown through the given triangle.



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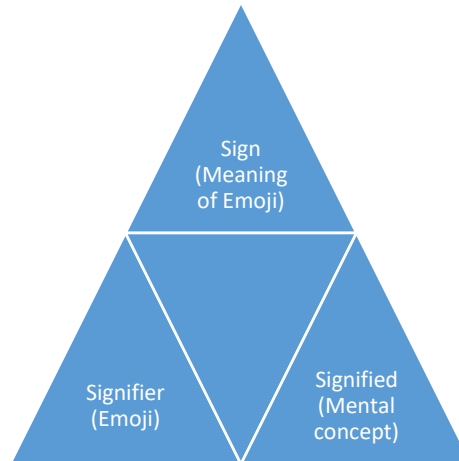


Figure 1: Subjective interpretation of signifiers (Emojis)

The triangle elicits that every emoji is just a signifier which is the graphical representation of a sign. It can be interpreted differently by the receiver or the sender and will create different meanings in different contexts i.e; gender, social setup, culture, etc. Emojis do not have a universal understanding. Identifying the gender differences in users' behavior has always been an important topic in human interaction. This study has looked into the change in the meaning interpretation of Emojis used in Whatsapp applications by university students at the graduate level.

HYPOTHESIS

Communication in digital era is not easy as it is making use of many emojis by young generation and if not familiar with the use of emojis, its use is one reason of misunderstanding and miscommunication.

OBJECTIVES

The main objectives of the research are:

- to study the meaning interpretation of Whatsapp Emojis among university learners
- to explore meaning differences of Emojis used by male and female learners at graduation level

RESEARCH QUESTIONS

Current research will answer the following research question.

1. To what extent do Emojis users at graduation level understand the meaning before using them?
2. Does gender affect the meaning as intended by the sender among university learners?

LITERATURE REVIEW

Bryne (1998) considers writing to be a process that transforms our ideas, thoughts, and concepts into a language through symbols. The limited number of signs and the absence of paralinguistic features in all written languages make it difficult to convey emotions in their true sense. Walter and D'Addario (2001) asserted that it becomes difficult to convey emotions through digital technology applications due to the absence of non-linguistic graphics developed and emoticon graphics were introduced during the 1970s to fill the gap in common communication replaced by Emojis in the late 1990s in Japan. Negishi (2014) proclaimed that two-dimensional pictures (images) have replaced emoticon graphics recently due to their popularity in most of the digital resources including mobile messaging applications like; Whatsapp, Snapchat, Facebook Messenger, Twitter, etc. Tauch & Kanjo (2016) asserted that emojis are visually and emotionally more expressive in conveying feelings and have become a core aspect of the digital world. They also claimed that more than 700 graphical representations of emojis on Whatsapp messenger have made it a powerful tool of expressing meaning by resemblance through its graphical representation to the physical objects. However, readers' interpretation of the meanings of emojis is always a question to be answered as Miler et.al (2016) also pointed out that meaning interpretation of emojis by people is not well understood. Emojis are visually-detailed graphics and are open to interpretation by the sender and the recipient. Barbieri, Ranzano & Saggion, (2016) stated that the use of Emojis strongly depends on context and community, behaving to be unpredictable and socially determined.

Whatsapp is a freeware and end-to-end encrypted instant messaging application for tablets and mobile phones carrying multiple functions, like text messages, images, voice calls, video calls, audio files, video files, and links to web addresses (Bouhnik & Deshen, 2014). It can also be used through the web and requires an android mobile number with an internet connection. The advantage of paying no charges by the users and following others through contact numbers have made it more approachable. Bansal & Joshi (2014) highlighted the addictive use of Whatsapp and predicted students to be the affected ones

due to its regular usage. Students at the graduation level become adults and independent learners. Bere (2013) observed students of an African university who supported the use of WhatsApp and claimed it to be an easier way to communicate (teachers and fellows) and have fun. They prefer emoji language over the natural symbolic language whereas McCulloch & Gawne (2018) argued Emojis to be an expression through digital gestures rather than grammar and language. Basnal & Joshi (2014) argued at another point that Whatsapp become a shared platform for intensifying accessibility, cooperation, and motivation of students. Muhammad (2017) conducted research and mentioned that young adults use emojis to express their feelings and emotions and to make the chats more interesting. Similarly, Gullberg's (2016) research focused on students of a university in Sweden. He stated that Swedish students use emoji as a divider between clauses. In addition to that Gullberg (2016) found in her research that emojis can help manage the conversation by providing additional information and preventing misunderstanding. She also claimed that younger people use more emojis than old-aged.

Emojis have been of great interest to researchers since researchers' perception in digital technology for communication purpose. Being a purposeful tool for conveying feelings and emotions, great research has been done on the usage of WhatsApp emoji. Its usage in with multiple dimensions but little was done on the interpretation of emoji meaning w.r.t gender and culture. Miler et al (2016) claimed that Emojis have their impact on understanding of messages. He evidenced variability of interpretation by employing 22 most popular smileys that people have varied preconceived ideas about meaning of emoji. Tigwell & Flatla (2016) surveyed 436 people about their use of emoji and investigated the difference in their interpretation of emoji. Barbieri, Ronzano & Saggion (2016) claimed that meaning of Emojis is unpredictable and socially-determined in spite of their meanings which are officially decided. A study by Lebduska (2014) showed that Emojis are culturally and contextually bound, and are open to reinterpretation and misinterpretation. Wicke (2017) also conducted a research and found that Emojis show vagueness in their meaning and only few are assumed to be universally understood. He also stated that emojis tend to be used symbolically and conceptually which may be interpreted in a varied way by the readers. Moreover, Barbieri et al (2016) also claimed that preferences in the use of Emojis vary from country to country. Annamalai & Salam (2017) also found varied interpretation of 75 Emojis when asked undergraduate students of a public university in Malaysia. Chen et al. (2018) conducted a research on emoji usage at a large scale. He collected data from 183 countries involving 134419 users and found that females use Emojis more frequently. They also found difference in preferences of emoji usage by males and female along sentiment expressions.

RESEARCH METHODOLOGY

The purpose of the current research is to investigate learners' interpretation of WhatsApp Emojis. It has explored the difference in interpretation of WhatsApp Emojis' w.r.t gender. Constructivist paradigm of research is used for deductive reasoning. Quantitative research inquiry is used where non-experimental research design is chosen because many human characteristics like; beliefs, attitudes, etc. are not possible to measure through controlled or experimental practices. Moreover, a non-experimental research design is more close to real-life situations and best suits the current research. The quantitative method is used because it involves numbers and uses the language of statistics which makes it closer to pure sciences. Moreover, the quantitative method quests for generalizability which is the target of the research. The survey research design used a questionnaire for data collection because it intends to understand similarities in population and enables the researcher to generalize the results. Moreover, data analysis was done by employing statistical software SPSS because it takes less time to manipulate a large amount of data and results can be generalized and standardized. The questionnaire survey was used to assess the feedback of the respondents.

POPULATION

Since learners of the English language in Pakistan can better understand the meaning interpretation of the English language. This research was conducted on students of English (MA/BS) subject who were enrolled in MA/ BS English in different universities located in Lahore. They fall in the same age bracket but represent different cultures and areas. Both private and public university students were given representation because both set-ups of universities have different cultures. All participants were screened and sorted for being regular users of Whatsapp. Learners from MA (English) and BS (English) who have completed their 14 years of education are the most suitable participants because they know the importance of change in the shade of meaning and are mastering the same subject which is the language of the questionnaire.

SAMPLING TECHNIQUE

A sample size of 100 graduates from four universities of Lahore was used to conduct this research by using random sampling technique. The students from two public and two private universities (located in Lahore, Punjab) were selected to make a sample of 100 in total, having an equal percentage for both genders. They were sent a structured questionnaire through Whatsapp for their responses.

COLLECTION OF THE DATA

Data were collected from the graduates of the public and private universities by using a survey questionnaire. A total of 100 Students from BS (English) and M.A (English) were asked to fill out the primary data source i.e; a questionnaire by

their instructors to whom the researcher has sent the questionnaire through Whatsapp. Learners were asked to reply the same through e.mail for future records. 100 responses are selected and 50 % of responses should be from each gender.

ANALYSIS OF THE DATA

Before analysis, the questionnaires were checked for missing data and outliers by using the outlier labeling rule. Then, the responses from the participants were analyzed using statistical software SPSS. Descriptive statistics like; mean and standard deviation are used and inferential tests like independent sample t-test are applied to find the change in meaning interpretation of Whatsapp Emojis among inter-gender, intra-gender, and culture respectively.

DESCRIPTION OF THE TOOL

A closed-ended questionnaire adapted from Annamalai and Salam (2017) was used to elicit respondents' views. It carried two sections. Respondents were asked for their demographic information like; their age, gender, users of smartphones, frequent users of Whatsapp, and frequency of using Emojis in social communication. Section 1 carries 50 randomly selected Emojis with multiple interpretations (3 each). Section 2 comprises statements for which, respondents have to select the appropriate emojis to express their feelings. Students were given 3 days in three different steps and within 10-15 days responses were recorded.

FRAMEWORK

The present research used the framework provided by Annamalai and Salam (2017) with some modifications.

RESULT AND DATA ANALYSIS

The current research was conducted by using a sample size of 100 participants with an equal number of males and females i.e. 50. Most of them were from the BS (English) program whereas only 12 participants from MA (English) participated in the research due to less number of MA (English) candidates in the university. 64% of the participants were from an urban background and 36% were from rural areas. All of them were regular users of smartphones and Whatsapp too. Participants were selected from 2 public and 2 private universities located in Lahore, Punjab which were; the University of Punjab (21), University of Education (19), University of Management and Technology Lahore (20) and The University of Lahore (40). In response to a question related to the frequency of use of Emojis in a day, 28% of respondents replied to use Emojis more than 30 times per day followed by 11-20 times and so on.

Table 1: Frequency of use of Emojis per day

























Use of emoji per day	Frequency	Percent
1-10	21	21.0
11-20	27	27.0
21-30	24	24.0
more than 30	28	28.0
Total	100	100.0

Table 2 clearly shows that only 26% of the participants always search or confirm the meaning of emoji before using it or sending it while conversing in a group on Whatsapp whereas 32% of the respondents which are in majority, rarely confirm the meaning of emoji, to be used in communication.

Table 2: Frequency of confirming the meaning of Emoji before using it

Confirm the meaning of emoji before using it	Frequency	Percent
Always	26	26.0
Sometimes	26	26.0
Rarely	32	32.0
Never	16	16.0
Total	100	100.0

Table 3: Meaning interpretations of Emojis

S. No	Emoji	Interpretation	S. No	Emoji	Interpretation
1	 Smiling face with a halo	a) Blessed (85%) b)Being nice (15%) c) Dizzy (0%) d) others (0%)	2	 Face with head bandage	a) headache (55%) b)sick (30%) c)feeling bad (12%) d)others (3%)
3	 Zipper mouth face	a) Keeping secret (20%) b)Mouth closed(70%) c) Shut up (8%) d) others (2%)	4	 Sleepy	a) sleepy (30%) b)helpless (32%) c)feeling dumb (34%) d)others (4%)
5	 Winking	a) winking (62%) b)funny (29%) c) feeling sexy (1%) d)others (8%)	6	 Face with rolling eyes	a) annoyed (57%) b)confused (32%) c)bored (3%) d) Others (8%)
7	 Smiling face	a)joyful (26%) b)happy (48%) c)shy (16%) d)others (10%)	8	 Laughing with cold sweat	a) guilty conscious (53%) b)stressed (16%) c)tired (1%) d)others (30%)
9	 Grinning face	a) grinning (38%) b)happy (26%) c)making fun (32%) d) others (4%)	10	 Grinning face with smiling eyes	a) grinning (41%) b)smiling (24%) c) happy (24%) d) others (11%)
11	 In love	a) love for others (27%) b)in state of love (39%) c)loving (34%) d)others (0%)	12	 Blowing a kiss with love	a) love (47%) b)want to kiss (33%) c)naughty (20%) d)others (0%)
13	 Loudly crying face	a) crying (50%) b)weeping (23%) c)feeling bad (26%) d) others (1%)	14	 Unamused face	a)unhappy (33%) b)annoyed (43%) c)bored (13%) d)others (11%)
15	 Relieved face	a) relieved (48%) b)relaxed (39%) c)sleepy (2%) d)others (11%)	16	 Flushed face	a)flushed (6%) b) shocked (58%) c)surprised (36%) d) others (0%)
17	 Crying face	a)crying (39%) b)sweating (15%) c) worried (46%) d)others (0%)	18	 Disappointed	a) sad (44%) b)sick (3%) c)disappointed (53%) d) others (0%)
19	 Worried face	a)moody (11%) b)worried (62%) c)boring (20%) d)others (7%)	20	 Revengeful	a) angry (38%) b)revengeful (47%) c)hatred (15%) d)others (0%)
21	 Screaming in fear	a) terrified (46%) b)feared (24%) c)screaming (15%) d)others (15%)	22	 Dizzy face	a)dead (15%) b)dizzy (66%) c)drunk (6%) d)others (13%)
23	 Face with tongue sticking out and winking eyes	a) feeling naughty (68%) b)feeling crazy (18%) c) phishing someone (14%) d)others (0%)	24	 Kissing face with smiling eyes	a) kissing (71%) b)whistling (19%) c)pouting (8%) d)others (2%)



























25	 Face with tears of joys	a)tears of joy (35%) b)drooling (5%) c)very funny (59%) d)others (1%)	26	 Face with look of triumph	a)triumph (13%) b)feeling bad (6%) c) irritated (72%) d)others (9%)
27	 Angry face	a)angry (88%) b)grumpy (6%) c)hatred (6%) d)others (0%)	28	 Face savouring delicious food	a)hungry (6%) b) tasty (23%) c)yummy (69%) d)others (2%)
29	 Pensive face	a)pensive (19%) b)sad (45%) c)disappointed (36%) d)others (0%)	30	 Pouting face	a) angry (64%) b)bad mood (20%) c) annoyed (12%) d)others (4%)
31	 smiling face with sunglasses	a)cool (81%) b)enjoying (0%) c)stylish (19%) d)others (0%)	32	 Smiling face with horns	a)devilish (66%) b)revengeful (15%) c)cheeky (17%) d)others (2%)
33	 Sleeping face	a)sleepy (70%) b)dizzy (23%) c)dreaming (5%) d)others (2%)	34	 Drooling	a)drooling (53%) b)spitting (19%) c)feeling sexy (5%) d)others (23%)
35	 Face with mask	a)sick (58%) b) veil (17%) c)conscious (13%) d)others (12%)	36	 Face with open mouth	a) shocked (58%) b)calm (2%) c)surprised (39%) d)others (1%)
37	 Worried face with cold sweat	a)confused (11%) b)scared (48%) c)frustrated (32%) d)others (9%)	38	 Hugging face	a>waving (9%) b)greeting (31%) c)hugging (60%) d)others (0%)
39	 Lying	a)lying (27%) b)poking nose in others matters (52%) c)pinocchio (6%) d)others (15%)	40	 Smirking face	a)smirking (44%) b)feeling naughty (18%) c)teasing (35%) d)others (3%)
41	 Tongue sticking out	a)joking (51%) b)joyful (11%) c)silly (35%) d)others (3%)	42	 Thinking face	a)thinking (70%) b)focused (5%) c)curious (23%) d)others (0%)
43	 Sneezing face	a)having flue (68%) b)sneezing (22%) c) smelly (5%) d)others (5%)	44	 Expressionless face	a) annoyed (23%) b)awkward (31%) c)expressionless (44%) d)others (2%)
45	 Rolling over the floor (laughing)	a)laughing loud (53%) b)very funny (45%) c)naughty (2%) d)others (0%)	46	 Upside down face	a) silly (29%) b)fake smile (53%) c)smiling (13%) d)others (5%)
47	 Face without mouth	a)speechless (63%) b)blank (26%) c)quiet (10%) d)others (1%)	48	 Nerd face	a) nerd (48%) b) chill (39%) c)happy (5%) d)others (8%)
49	 Money- mouth face	a) money minded (22%) b) greedy (38%) c) money lover (30%) d)others (10%)	50	 Tired face	a)lazy (16%) b) irritated (56%) c) weary (12%) d) others (16%)

Table 3 illustrates the percentage of varied interpretations of an emoji by the respondents. It can be noted down that there is not even a single emoji that is interpreted the same by all the participants (100%). Some of the Emojis like; smiling face with a halo, zipper mouth face, winking worried, dizzy, kissing, face with tongue sticking out and winking eyes, irritated, angry, face savoring delicious food, pouting face, smiling face with sunglasses, devilish, smiling face with horns, sleepy, hugging face and thinking face have percentages of interpreted meaning to be more than 60% for at least one option which makes it closer to the same meaning interpretation by maximum participants. Option number 4 “other” is given in all statements. Emojis such as; smiling face with halo, in love, blowing a kiss with love, crying face, disappointed face, revengeful face, face with tongue sticking out and winking eyes, pensive face, thinking face and rolling over face got zero % for the last option of the statement (other) which indicates that respondents were not confused to mark an option for emoji interpretation out of the given ones. Table 3 also indicates that respondents are much more confused to mark an option for emoji like sleepy, grinning, in love, unamused, loudly crying and money mouth face because there is no marked difference among the different interpretations of the given emoji. Meaning interpretations are available online and were also given in questionnaires as well. Table 3 clearly indicates that respondents have meaning interpretations of their own choice which may or may not be the same as that of the intended meaning of the given emoji.

Table 4: Selection of Emojis










































S.No	Statement	1	2	3	4
1.	I am excited to hear the news of Eid.	 84%			 16%
2	I love you.	 10%		 59%	 31%
3	I feel sleepy.	 6%	 85%	 8%	 1%
4	You have made sumptuous food.	 61%	 5%	 27%	 7%
5	I am not feeling well.	 35%	 28%	 8%	 29%
6	You look very cool.	 14%	 82%	 4%	
7	You are very silly.	 46%	 5%	 31%	 18%
8	I am terrified.	 88%	 8%	 2%	 2%
9	I am tired of everything.	 15%	 52%	 13%	 20%
10	I am speechless.	 3%	 80%	 10%	 7%

Table 4 presents some of the common statements of daily use as reported in section II of the questionnaire. It is noted in each statement that most of the respondents are very close to the intended meaning of the emoji as given in online interpretations. It can also be illustrated from table 4 that the Emojis which are most commonly used may be interpreted near same but not same as some minor values are also given to rest of the three Emojis.

Table 5 (a): Relationship of gender and emoji interpretation

S.No	Emoji	Gender	N	Mean	Std. Deviation	T	Sig. (2-tailed)
1	 Smiling face with a halo	male	50	1.2000	.40406	1.400	.165
		female	50	1.1000	.30305		
2		male	50	1.5200	.61412	-1.360	.177

	 Face with head bandage	female	50	1.7400	.96489		
3	 Zipper mouth face	male	50	1.7600	.68690	-2.766	.007
		female	50	2.0800	.44447		
4	 Sleepy	male	50	2.0400	.85619	-.897	.372
		female	50	2.2000	.92582		
5	 Winking	male	50	1.5400	.88548	-.115	.909
		female	50	1.5600	.86094		
6	 Face with rolling eyes	male	50	1.8800	.96129	3.059	.003
		female	50	1.3600	.72168		
7	 Smiling face	male	50	2.0600	.91272	-.440	.661
		female	50	2.1400	.90373		
8	 Laughing with cold sweat	male	50	1.6800	1.05830	-3.157	.002
		female	50	2.4800	1.44618		
9	 Grinning face	male	50	1.8600	1.01035	-1.734	.086
		female	50	2.1800	.82536		
10	 Grinning face with smiling eyes	male	50	2.1000	.95298	.475	.636
		female	50	2.0000	1.14286		
11	 In love	male	50	1.8800	.74615	-2.494	.014
		female	50	2.2600	.77749		
12	 Blowing a kiss with love	male	50	1.7800	.78999	.642	.522
		female	50	1.6800	.76772		
13	 Loudly crying face	male	50	1.7800	.78999	.000	1.000
		female	50	1.7800	.95383		
14	 Unamused face	male	50	2.1200	1.00285	1.050	.296
		female	50	1.9200	.89989		
15	 Relieved face	male	50	1.7000	.83910	-.634	.528
		female	50	1.8200	1.04374		
16	 Flushed face	male	50	2.4000	.60609	1.750	.083
		female	50	2.2000	.53452		
17	 Crying face	male	50	1.8600	.92604	-2.323	.022
		female	50	2.2800	.88156		
18	 Disappointed	male	50	2.4000	.90351	3.298	.001
		female	50	1.7800	.97499		
19	 Worried face	male	50	2.1400	.70015	-1.225	.224
		female	50	2.3200	.76772		
20	 Revengeful	male	50	1.9400	.71171	2.514	.014
		female	50	1.6000	.63888		
21	 Screaming in fear	male	50	1.9800	1.15157	-.090	.928
		female	50	2.0000	1.06904		
22	 Dizzy face	male	50	2.0200	.71400	-1.803	.075
		female	50	2.3200	.93547		
23	 Face with tongue sticking out and winking eyes	male	50	1.4600	.64555	.000	1.000
		female	50	1.4600	.81341		

24	 Kissing face with smiling eyes	male	50	1.5400	.67643	1.811	.073
		female	50	1.2800	.75701		
25	 Face with tears of joy	male	50	2.1000	.95298	-1.682	.096
		female	50	2.4200	.94954		
26	 Face with look of triumph	male	50	2.6200	.77959	-1.926	.057
		female	50	2.9200	.77828		
27	 Angry face	male	50	1.2400	.59109	1.156	.250
		female	50	1.1200	.43519		
28	 Face savouring delicious food	male	50	2.6000	.67006	-1.130	.261
		female	50	2.7400	.56460		
29	 Pensive face	male	50	2.0800	.77828	-1.244	.216
		female	50	2.2600	.66425		
30	 Pouting face	male	50	1.6600	.89466	1.170	.245
		female	50	1.4600	.81341		
31	 Smiling face with sunglasses	male	50	1.5600	.60609	2.333	.022
		female	50	1.2000	.78895		
32	 Smiling face with horns	male	50	1.5000	.90351	-.590	.557
		female	50	1.6000	.83910		
33	 Sleeping face	male	50	1.5000	.45356	1.631	.106
		female	50	1.2800	1.05463		
34	 Drooling	male	50	1.7000	1.33722	-2.325	.022
		female	50	2.2600	.89921		
35	 Face with mask	male	50	1.7400	1.23487	-.463	.644
		female	50	1.8400	.95959		
36	 Face with open mouth	male	50	1.7600	1.03510	-.701	.485
		female	50	1.9000	.79385		
37	 Worried face with cold sweat	male	50	2.3200	.81341	-.871	.386
		female	50	2.4600	.60609		
38	 Hugging face	male	50	2.6000	.70247	1.372	.173
		female	50	2.4200	.71027		
39	 Lying	male	50	1.8400	1.11776	-2.670	.009
		female	50	2.3400	.84781		
40	 Smirking face	male	50	1.6600	.96975	-3.404	.001
		female	50	2.2800	.95298		
41	 Tongue sticking out	male	50	1.9000	1.03510	.000	1.000
		female	50	1.9000	.86213		
42	 Thinking face	male	50	1.5400	.88433	-.115	.909
		female	50	1.5600	1.01015		
43		male	50	1.6000	.51942	1.619	.109









	 Sneezing face	female	50	1.3400	.83397		
44	 Expressionless face	male	50	2.2800	.84007	.358	.721
		female	50	2.2200	.57463		
45	 Rolling over the floor (laughing)	male	50	1.5800	.49487	1.678	.096
		female	50	1.4000	.64681		
46	 Upside down face	male	50	1.7000	.84973	-3.178	.002
		female	50	2.1800	.57994		
47	 Face without mouth	male	50	1.4800	.83910	-.139	.890
		female	50	1.5000	.73512		
48	 Nerd face	male	50	1.5200	.97750	-2.428	.017
		female	50	1.9400	.73540		
49	 Money mouth face	male	50	2.1000	1.05386	-1.981	.050
		female	50	2.4600	.80837		
50	 Tired face	male	50	2.1400	1.01197	-1.529	.130
		female	50	2.4200	1.05153		

Table 5 (b): Relationship of gender and emoji interpretation

	Statements	Gender	N	Mean	Std. Deviation	t	Sig. (2-tailed)
1	I am excited to hear the news of Eid.	male	50	1.4200	1.05153	-.541	.590
		female	50	1.5400	1.16426	-.541	.590
2	I love you.	male	50	3.3600	.48487	3.105	.002
		female	50	2.8600	1.03036	3.105	.003
3	I am feeling sleepy.	male	50	2.0800	.52838	.942	.349
		female	50	2.0000	.28571	.942	.349
4	You have made sumptuous food.	male	50	1.8800	1.17178	.750	.455
		female	50	1.7200	.94847	.750	.455
5	I am not feeling well.	male	50	2.6600	1.25536	2.959	.004
		female	50	1.9600	1.10583	2.959	.004
6	You look very cool.	male	50	1.9800	.42809	1.958	.053
		female	50	1.8200	.38809	1.958	.053
7	You are very silly.	male	50	2.0600	1.07684	-1.245	.216
		female	50	2.3600	1.32110	-1.245	.216
8	I am terrified	male	50	1.2000	.69985	.357	.722
		female	50	1.1600	.37033	.357	.722
9	I am tired of everything	male	50	2.4000	1.03016	.205	.838
		female	50	2.3600	.92051	.205	.838
10	I am speechless.	male	50	2.2400	.74396	.492	.624
		female	50	2.1800	.43753	.492	.624

Table 5 (a) and (b) indicate that Emojis such as; zipper mouth face, face with rolling eyes, laughing with cold sweat, in love, crying face, disappointed, revengeful, smiling face with sunglasses, drooling, lying, smirking, upside down, nerd face show value of t less than 0.05 which means that thirteen out of fifty emoji show a difference in the meaning interpretation of Emojis w.r.t gender. It could be analyzed from the data and results can be interpreted as given in table 6.

Table 6 (a): Meaning interpretation by males and females

Emoji	Sign. (2-tailed)	Mean (Male) with preferred interpretation	Mean (Female) with preferred interpretation
Zipper mouth face	0.007	1.7600 (Mouth closed)	2.0800 (Shut up)
Face with rolling eyes	0.003	1.8800 (confused)	1.3600 (annoyed)
Laughing with cold sweat	0.002	1.6800 (stressed)	2.4800 (tired)
In love	0.014	1.8800 (in state of love)	2.2600 (loving)
Crying face	0.022	1.8600 (sweating)	2.2800 (worried)
Disappointed	0.001	2.4000 (disappointed)	1.7800 (sick)
Revengeful	0.014	1.9400 (revengeful)	1.6000 (angry)
Smiley face with sun glasses	0.0222	1.5600 (enjoying)	1.2000 (cool)
Drooling	0.022	1.7000 (spitting)	2.2600 (feeling sexy)
Lying	0.009	1.8400 (poking nose in others matters)	2.3400 (pinochio)
Smirking face	0.001	1.6600 (feeling naughty)	2.2800 (teasing)
Upside down face	0.002	1.7000 (fake smile)	2.1800 (smiling)
Nerd face	0.017	1.5200 (nerd)	1.9400 (chill)









Moreover, selection of emoji also varies for males and females for two statements out of ten which is summarized in table 6-b. Table 6-b clearly illustrates that males prefer  to state “I love you” whereas females prefer . Similarly, males prefer  and females prefer  to state “I am not feeling well.”.

Table 6(b): Meaning interpretation by males and females

Statements	Sign. (2-tailed)	Mean	Preferred Emoji
I love you.	0.002	3.3600 (Male)	
		2.8600 (Female)	
I am not feeling well.	0.004	2.6600 (Males)	
		1.9600 (Females)	

DISCUSSION

Whatsapp is an application that allows its users to send text messages, videos, documents, and others without any charges. It only needs an internet connection. Hashim et. al. (2015) reported that it has become an application that can create a major impact on communication in the digital era. Human beings are not very good to interpret feelings and emotions. Messages (verbal or non-verbal), may lead to misinterpretation if not understood in the real context. Emojis are of great interest to researchers due to their powerful and easy-to-use intent of the communication. Ling (2016) reported that there is the possibility of miscommunication through Whatsapp due to misinterpretation of the message, especially the visual cues. In addition to that, Tigwell and Flatla (2016) reported that wrong meaning interpretation of Emojis would lead to communication gaps and even can damage relations.

The current research was done to analyze the difference in interpretations of emojis by users of Whatsapp. They use the Whatsapp application for multiple purposes. It was noted that graduates at the university level are frequent users of Whatsapp and prefer to communicate through emojis while expressing their feelings. In the light of the above research, it is found that smileys render different meanings to different persons. Even frequent users of such graphical representations in Whatapp interpret the same emoji differently which leads to miscommunication. This research supported other researches which are done with the same intent. Use of emojis has made it easier to express one's feelings but at the same time creates great problems if interpreted wrongly. This misinterpretation is caused not only due to differences in age, gender, culture, or sub-culture but varies from person to person due to certain differences. Males and females have their own sub-cultures and interpret such expressions accordingly.

CONCLUSION

This research concludes that university graduates interpret Emojis differently which results in miscommunication among its users. This difference in meaning interpretation is applicable between two genders and intra-gender too which is dependent on culture and context. Everyone provides one's own meanings to each emoji, besides their meanings are available online. Meaning is socially determined by the members of the community in specific culture and context. In the light of the above research, it is also suggested that if every emoji would have a pop-up message along with its sign, it would create a better communication environment by saving the time and energy of the users and will make Emojis a better tool for conveying emotions and feelings.

CREDIT AUTHOR STATEMENT

Shaista Ghazanfar: Conceptualization, Methodology, Data analysis, Writing- Reviewing and Editing., **Dr. Saira Maqbool:** Suprvising, Editing- Reviewing. **Dr. Rubina Masum:** Investigation, Validation.

COMPLIANCE WITH ETHICAL STANDARDS

It is declare that all authors don't have any conflict of interest. Furthermore, informed consent was obtained from all individual participants included in the study.

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