

# **Impact of Emojis on Message Conversation Through Social Media**

**Dr. Meenakshi Jindal, Lecturer Physics**

*Email: meenu20nov@gmail.com*

**AasthaWalia, student**

*Email:aasthawalia99@gmail.com*

**Saumya Gupta, student**

*Email:saumya1984@gmail.com*

**Devange Gupta, student**

*Email:devangegupta@gmail.com*

---

## **Abstract**

One of the drawbacks of digital communication is that it lacks non-verbal cues. It is difficult to convey emotions, feelings and attitudes through text messaging. One of the ways to overcome this drawback is the use of emojis along with the text. Emojis can be used to provide information as well as to express various emotions. But the emojis are susceptible to different perceptions. These perceptions are affected by various factors like age and gender. In the present study eight small messages were prepared along with the probable responses from the person who received it. Each message was repeated three times, first having only text and the other two with different emojis along with text. The participants were asked to choose most appropriate response for each message. The results showed that 1. Presence of emoji along with text makes responses more conclusive, 2. Different emojis convey different emotions, 3. Responses change according to emotions conveyed by emoji rather than the meaning of the statement and 4. Influence of some emojis is more polarizing than the others.

Date of Submission: 05-03-2022

Date of Acceptance: 21-03-2022

---

## **I. Introduction**

Communication is the process of interaction through the exchange of information, feelings, thoughts, and ideas with others. The interaction can take place by the exchange of information through words (written or oral), gestures, signs, symbols, and expressions. Though words written or spoken and symbols make the verbal form of communication, gestures and expressions constitute the non-verbal form of communication. Non-verbal form of communication is equally important as verbal communication because it can communicate emotions, feelings, and attitudes. When people communicate face to face, not only do the words matter but non-verbal cues are equally important.

Facial expressions and gestures form a major part of non-verbal communication in humans. These are communication signals without vocabulary. Body language (way of standing or sitting or movement of legs or hands), smiles, facial expressions, and other gestures convey much more than words and are used even to judge a speaker's attitude and emotions. With advancements in technology, the ways of communication are also changing. Rather than face to face, it is shifting more towards digital communication, (Kannan & N Shreya, 2017). Digital communication has become more prominent than ever before. It has made communicating with others easier and faster.

Texts messaging via the internet, what's app, and other such platforms have become one of the most popular forms of digital communication. Though text messaging has proved to be a beneficial way to communicate with others without any face-to-face contact, it suffers from the drawbacks of not communicating the non-verbal cues, particularly emotions and feelings. (Coyle, Maureen & Carmichael, Cheryl, 2019)

From time to time efforts are being made to improve the quality of communication through text messaging and make it more effective.

The introduction of emotions was one such effort. It was an attempt to substitute the nuances of face-to-face communication in online mediums to depict facial expressions, moods, and emotions. Emojis are the successors of emoticons. These are graphic forms of emoticons developed in Japan and are used not only to express various emotions but for varying purposes like providing information, modifying tone, managing and

terminating conversation, maintaining relationships, etc. (Coyle, Maureen & Carmichael, Cheryl, 2019). They can make a text message more appealing to trigger a more intense response. (Cramer et al., 2016, retrieved from: Coyle, Maureen & Carmichael, Cheryl. (2019)).

Over the years emojis have gained popularity and also the number of emojis available has become many folds. But emojis are also susceptible to different perceptions. The perceptions differ according to age, gender, culture, personality and even generation. Jager et al. (2017) found that age related differences exist in the interpretation of emojis. Persson and Niklas (2019) found that females use emojis to illustrate emotion and whereas males use it to emphasize the message.

The present study deals with the perception of a message with and without the presence of emoji along with the text.

### **Keywords**

Emojis, text messages, digital communication, face to face communication, social media

### **Significance of the present study**

No one can deny the enormous benefits of digital communication. It is fast and convenient. It has entered every walk of our life- at the workplace and for maintaining a personal relationship. We use digital communication with ease. But digital communication lacks the signals transmitted through face-to-face communication. These signals are nonverbal cues. From facial expression or the movement of your foot or hand while being involved in a dialogue, can be a cue that might indicate to the other person how you feel at that moment. Digital communication lacks the nonverbal cues grossly. Emojis can act as a language to communicate the nonverbal cues and emotions along with the text. But the emojis are subjected to perception. The present study gives insight into how messages with or without emoji are perceived differently and how the choice of emoji affects the emotion conveyed with the text message. The study is significant to understand how the use of emojis can help to bridge the gap between face-to-face and digital communication.

## **II. Review of previous studies**

Cramer, de Juan & Tetreault (2016) investigated the motivations of 228 participants for the emojis they used for their last conversational message. They collected the messages with a description of the emoji's intended meaning and function. Their results showed that the social function of emojis is complex and varied. They showed that emojis can facilitate important conversational functions.

Jaeger et al. (2017) researched around 33 different facial emojis to analyze the differences in interpretations by age groups and demographics. Through their study, they found out that few age-related differences existed with regard to emoji interpretation.

Willoughby & Liu (2018) conducted an experiment with 426 young adults to assess the impact of narrative messages (e.g., stories) and the use of emojis on message processing and message attention. The results of the study showed a mixed response. The exposure to non-narrative messages without emojis resulted in an increased message elaboration and perception of credibility. Also, the research highlighted that, depending on the goals and content of the messaging, the message format and features also influence the use of emojis.

Al Rashdi (2018) examined the functions of emojis used in messages exchanged by Omani men and women friends on WhatsApp through this paper. The data consisted of naturally occurring WhatsApp conversations taken from one male only and one female only WhatsApp group. Through the analysis of selected emojis, the results demonstrated that emojis serve as indicators of users' emotions, and many other communicative functions.

Duan, Xia & Van Swol (2018) studied the influence of emoticons on advice taking. Through their research, they found out that emoticons convey emotional information. To test their hypothesis they undertook two experiments where they examined two moderators: involvement and cognition that affect message processing. Through study 1 they found that emoticons increased the intention to utilize advice but under conditions involving a lower rate of involvement. Study 2 replicated the effects of Study 1 but also found that emoticons have a stronger effect on participants who have a lower need for cognition.

Persson & Niklas (2019) examined data from 15 female and 15 male participants and used it to provide reports on the differences in preference and functions of emoji usage across genders. The study found that in variety and in total, males tend to select a greater amount of emojis, in comparison to females. The users' reasons for using emojis in instant messages varied across the two gender groups. Females focused on illustrating a state of emotion, males focused on emphasizing a message. This study also showed that in general, people (mainly men) prefer using emojis to complement rather than to replace words.

Völker & Mannheim (2021) studied the non-verbal cues presented by emojis in digital communication and how they impact the meaning of a message. They experimented on 50 emojis present on WhatsApp messages and tested their influence on the interpretation of messages as factual information, self-revelation of

the sender, relationship information, or an appeal. The result of their study showed that a message which contained an emoji was usually interpreted as self-revelation whereas sole text messages were perceived as factual information. They finally concluded that emojis may extract emotional information from text messages to which emotionally intelligent recipients were extra responsive.

### III. Delimitation

The study was delimited to:

1. Tricity of Chandigarh.
2. Urban teenagers (both boys and girls).

### IV. Objectives

- To study the impact of emojis on message perception through social media.

### V. Methodology

#### Population

Chandigarh, Mohali and Panchkula constitute the tricity of Chandigarh. All the teenagers residing in Tricity of Chandigarh and studying in various urban schools form part of the population of the study.

#### Sample

A representative group of 100 urban teenagers was drawn out randomly from the population for the research purpose. The data was collected using Google forms. 13 participants formed experimental mortality. The analysis is based on an effective sample of 87 participants.

#### Tools used

The following tool was used to collect the data:

The questionnaire with 8 messages constructed by the investigators

#### Statistical tools used

The analysis was done by calculating the percentage of participants giving a particular response.

#### Procedure

In this study, eight small messages were prepared along with three probable responses from the person who received them. Each question was repeated three times. First, there was only a text message without any emoji. Second, the same message was repeated but with an emoji at the end. Third, yet again, the same message was repeated but this time with a different emoji. For example, the message, 'I banged my head against the cupboard,' was presented without emoji, with emoji, and again with another different emoji with the message. The data was collected using a google form. The participants were asked to choose the most appropriate response according to them for each message. It was seen that for the same message the choice of response varied with the presence or absence of emoji and also with the change of type of emoji. The data were tabulated and subjected to analysis.

### VI. Analysis of the study


The analysis of the data is shown in the following tables. The tables show the responses to different messages as given by the participants.


**Table 1: Responses of message-1**

Text Message-1	Are you all right?	Hahaha, me too!	Really?
I banged my head against the cupboard	40.23%	25.29%	34.48%
I banged my head against the cupboard 😭	64.37%	24.14%	11.49%
I banged my head against the cupboard 🙄	62.07%	9.2%	28.74%

Table 1 shows the percentage responses for message-1. The number of participants responding in a particular way is presented in percentage.

When asked to respond to the message 'I banged my head against the cupboard' without any emoji, 40.23% of participants responded with 'are you all right?' 25.29% responded with 'Hahaha, me too!' and 34.48% responded with 'really?'

When accompanied with emoji 1 () , 64.37% of participants responded with ‘are you alright?’ 24.14% responded with ‘Hahaha, me too!’ and 11.49% responded with ‘really?’

Lastly, When accompanied with emoji 2 () , 62.07% of participants responded with ‘are you all right?’ 9.2% responded with ‘Hahaha, me too!’ and 28.74% responded with ‘really?’

**Table 2: Responses of message-2**





Text Message-2	Are you unwell or something?	Haha, you got me	What did I do!?
I am angry with you today	14.94%	14.94%	70.11%
I am angry with you today 	20.69%	37.93%	41.38%
I am angry with you today 	41.38%	9.2%	49.43%

Table 2 shows the percentage responses for message-2.

For the statement ‘I am angry with you today’ without emoji, ‘are you unwell or something?’ was responded by 14.94% of participants, ‘Ha-ha, you got me’ was chosen by 14.94% of participants and ‘What did I do!’ was chosen by 70.11% participants.

For the statement ‘I am angry with you today’ with emoji 1 () , ‘Are you unwell or something?’ was chosen by 20.69% of participants, ‘Ha-ha, you got me’ was responded by 37.93% participants and ‘What did I do!’ was responded by 41.38% participants.

For the statement ‘I am angry with you today’ with emoji 2 () , ‘Are you unwell or something?’ was chosen by 41.38% of participants, ‘Ha-ha, you got me’ was responded by 9.2% of participants and ‘What did I do!’ was chosen by 49.43% of participants.

**Table 3: Responses of message-3**






Text -Message-3	Good for you!	You're kidding right!?	I don't believe it!
I am enjoying studies these days	54%	25.3%	20.7%
I am enjoying studies these days 	51.7%	20.7%	27.6%
I am enjoying studies these days 	33.3%	43.7%	23%

Table 3 shows percentage responses for message-3. When presented with the statement ‘I am enjoying studies these days’ without emoji, ‘Good for you!’ was the response by 54% of participants, ‘you’re kidding right!?’ by 25.3% of participants and ‘I don’t believe it!’ was responded by 20.7% participants.

When the statement, ‘I am enjoying studies these days’, was accompanied by emoji 1 () , the response, ‘Goodfor you!’ was responded by 51.7% participants, ‘you’re kidding right!?’ was chosen by 20.7% participants and ‘I don’t believe it!’ was answered by 27.6% participants.

And when the statement, ‘I am enjoying studies these days’, was presented with emoji 2 () , ‘Good for you!’ , was chosen by 33.3% participants, ‘You’re kidding right!?’ was the most common response, by 43.7% participants and ‘I don’t believe it!’ was responded by 23% participants.

**Table 4: Responses of message-4**

Text-Message-4	Sure, what is it?	Is everything alright?	I'll be happy to help
Hey, I have a favour to ask you	70.1%	10.3%	19.5%
Hey, I have a favour to ask you 	21.8%	70.1%	8%

Hey, I have a favour to ask you 🙏	44.8%	18.4%	36.8%
-----------------------------------	-------	-------	-------

Table 4 shows percentage responses for message-4.

For the statement ‘Hey, I have a favour to ask you’ without emoji, 70% chose to respond as ‘Sure, what is it?’ 10.3% chose, ‘Is everything alright?’ and ‘I’ll be happy to help’ was answered by 19.5% participants.

For the statement ‘Hey, I have a favour to ask you’ with emoji 1 (😬), ‘Sure, what is it?’ was responded by 21.8% of participants, ‘Is everything alright?’ was answered by 70.1% of participants and ‘I’ll be happy to help’ was answered by 8% participants.

For the statement ‘Hey, I have a favour to ask you’ with emoji 2 (😓), ‘Sure, what is it?’ was answered by 44.8% participants, ‘Is everything alright?’ was chosen by 18.4% of participants and ‘I’ll be happy to help’ was answered by 36.8% of participants.

**Table 5: Responses of message-5**

Text-Message-5	That’s so sad	Better luck next time	How could you ever fail!
I failed the math quiz	39.1%	50.6%	10.3%
I failed the math quiz 😭	47.1%	41.4%	11.5%
failed the math quiz 😂	14.9%	31%	54%

Table 5 shows percentage responses for message-5.

For the statement ‘I failed the math quiz’ without emoji, ‘That’s so sad’ was responded by 39.1% of participants, ‘Better luck next time’ was chosen by 50.6% of participants and ‘How could you ever fail!’ was answered by 10.3% participants.

For the statement ‘I failed the math quiz’ with emoji 1 (😭), ‘That’s so sad’ was chosen by 47.1% of participants, ‘Better luck next time’ was chosen by 41.4% of participants and ‘How could you ever fail!’ was answered by 11.5% of participants.

For the statement ‘I failed the math quiz’ with emoji 2 (😂), ‘That’s so sad’ was responded by 14.9% of participants, ‘Better luck next time’ was chosen by 31% of participants and ‘How could you ever fail!’ was answered by 54% of participants.

**Table 6: Responses of message-6**

Text-Message-6	My eyeballs popped out!	I have never seen a prettier dress	It looked pathetic
Did you see the red dress she was wearing at the party	29.9%	56.3%	13.8%
Did you see the red dress she was wearing at the party 🤩	42.5%	54%	3.4%
Did you see the red dress she was wearing at the party 🤮	11.5%	13.8%	74.7%

Table 6 shows percentage responses for message-6. For the statement ‘Did you see the red dress she was wearing at the party’ without emoji, ‘ My eyeballs popped out!’ was responded by 29.9% of participants, ‘I have never seen a prettier dress’ was chosen by 56.3% of participants and ‘It looked pathetic’ was answered by 13.8% of participants.

For the statement ‘Did you see the red dress she was wearing at the party’ with emoji 1 (🤩), ‘ My eyeballs popped out!’ was responded by 42.5% participants, ‘I have never seen a prettier dress’ was chosen by 54% of participants and ‘It looked pathetic’ was answered by 3.4% participants.

For the statement ‘Did you see the red dress she was wearing at the party’ with emoji 2 (🤩), ‘My eyeballs popped out!’ was chosen by 11.5% of participants, ‘I have never seen a prettier dress’ was chosen by 13.8% of participants and ‘It looked pathetic’ was answered by 74.7% of participants.

**Table 7: Responses of message-7**

<b>Text-Message-7</b>	<b>That is horrible</b>	<b>What did you do !?</b>	<b>You deserve it</b>
My parents grounded me today!	29.9%	59.8%	10.3%
My parents grounded me today! 😡	43.7%	48.3%	8%
My parents grounded me today! 😂	4.6%	35.6%	59.8%

Table 7 shows percentage responses for message-7.

For the statement ‘My parents grounded me today!’ without emoji, ‘That is horrible’ was answered by 29.9% of participants, ‘what did you do!?’ was chosen by 59.8% of participants and ‘You deserve’ was answered by 10.3% of participants.

For the statement ‘My parents grounded me today!’ with emoji 1 (😡), ‘That is horrible’ was answered by 43.7% of participants, ‘what did you do!?’ was chosen by 48.3% of participants and ‘You deserve’ was answered by 8% participants.

For the statement ‘My parents grounded me today!’ with emoji 2 (😂), ‘That is horrible’ was answered by 4.6% of participants, ‘what did you do!?’ was chosen by 35.6% of participants and ‘You deserve’ was answered by 59.8% participants.

**Table 8: Responses of message-8**

<b>Text-Message-8</b>	<b>I hope you didnt burn down the kitchen!</b>	<b>Wow!</b>	<b>You must be tired!</b>
I baked a cake for the first time	43.7%	47.1%	9.2%
I baked a cake for the first time 😞	54%	11.5%	34.5%
I baked a cake for the first time 😊	20.7%	69%	10.3%

Table 8 shows percentage responses for message-8.

For the statement ‘I baked a cake for the first time’ without emoji, ‘I hope you didnt burn down the kitchen !’ was answered by 43.7% of participants, ‘wow!’ was chosen by 47.1% of participants and ‘You must be tired !’ was answered by 9.2% of participants.

For the statement ‘I baked a cake for the first time’ with emojis 1 (😞), ‘I hope you didnt burn down the kitchen !’ was answered by 54% of participants, ‘wow!’ was chosen by 11.5% participants and ‘You must be tired !’ was answered by 34.5% participants.

For the statement ‘I baked a cake for the first time’ with emoji 2 (😊), ‘I hope you didnt burn down the kitchen !’ was answered by 20.7% of participants, ‘wow!’ was chosen by 69% participants and ‘You must be tired !’ was answered by 10.3% participants.

## VII. Discussion

### A. Presence of emojis makes responses more conclusive

When given a statement, we found that there were variations depending on the presence/absence of an emoji. In most cases, overall responses to the messages without emoji were more divided compared to the overall responses to statements with an emoji which were more conclusive.

Example 1,

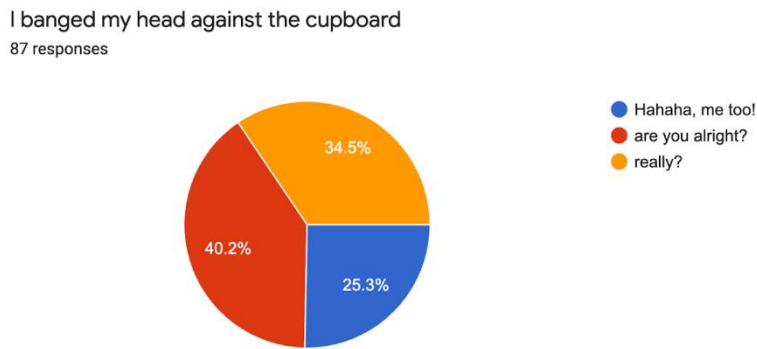


Figure 1: Pie chart showing percentage responses for message, 'I banged my head against the cupboard'

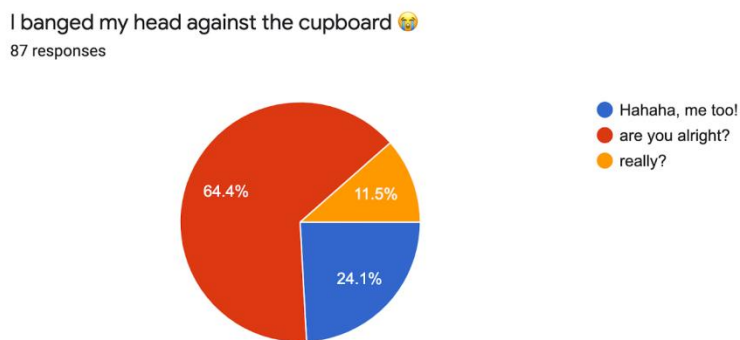


Figure 2: Pie chart showing percentage responses for message, 'I banged my head against the cupboard with emoji 1'

The responses to the message "I banged my head against the cupboard" without an emoji were divided and present unclear picture as shown by figure 1 above. Whereas the same statement with emoji presents a clear majority (64.4%) for the response "are you alright?" as shown in figure 2.

### B. Different emojis convey different emotions

When different emoji was used in a message responses differed vastly for most cases. Such as, the response to the message 'Hey, I have a favour to ask you' changed largely with change in the choice of emoji.

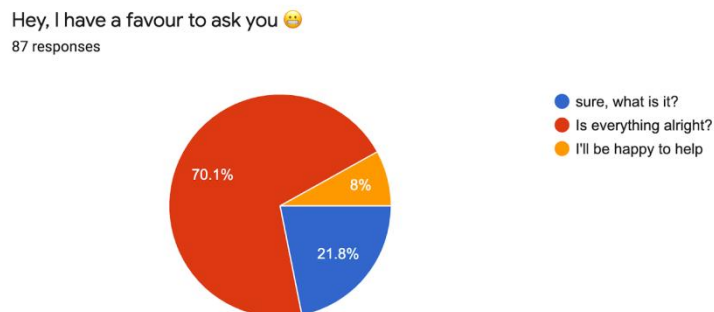


Figure 3: Pie chart showing percentage responses for message, 'Hey, I have a favour to ask you' with emoji 1

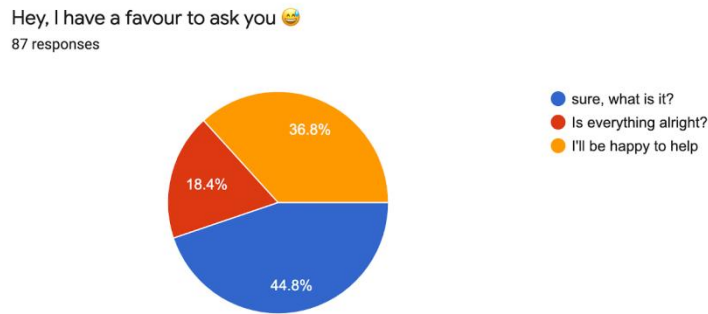


Figure 4: Pie chart showing percentage responses for message, ‘Hey, I have a favour to ask you’ with emoji 2

The pie charts in figure 3 & 4, above show the comparison between responses for the statement ‘Hey, I have a favor to ask you’ when two different emojis are used. There is 51.7% decrease in response for ‘is everything alright?’, 23% decrease in response for ‘sure what is it?’ and a 28.8% increase in response for ‘I will be happy to help’ when the emoji is changed from 😊 to 😂 for the statement.

**Example 2:** Same is the case with message ‘I am angry with you’ where the percentage of responses changed completely by changing the emoji with the same message.

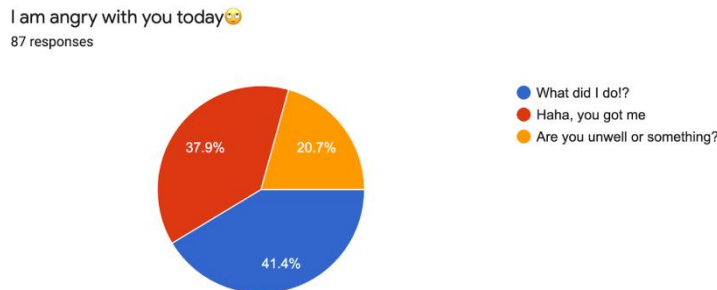


Figure 5: Pie chart showing percentage responses for message, ‘I am angry with you’ with emoji 1

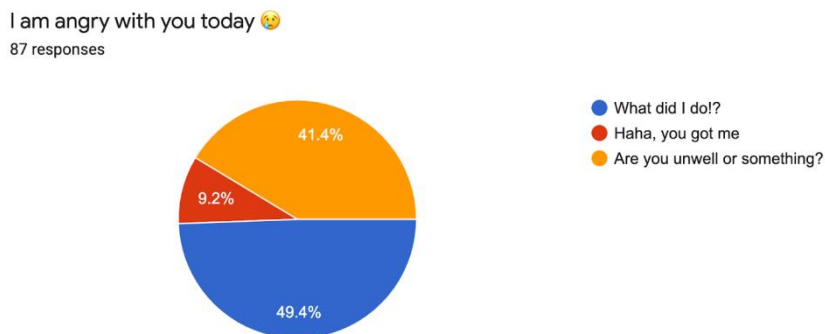


Figure 6: Pie chart showing percentage responses for message, ‘I am angry with you’ with emoji 2

Example 3

For the message, ‘I am enjoying studies these days’ the response ‘you are kidding, right’ doubled (20.7% to 43.75) when a different emoji was used with the text.



I am enjoying studies these days 🤔  
87 responses

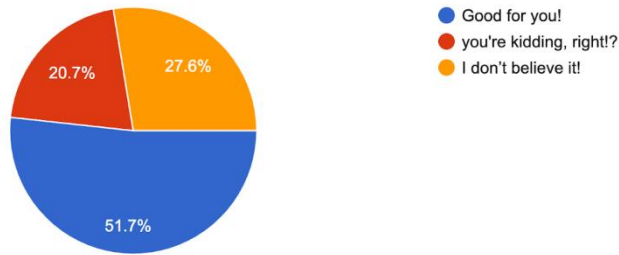


Figure 7: Pie chart showing percentage responses for message, 'I am enjoying studies these days' with emoji 1

I am enjoying studies these days 😊  
87 responses

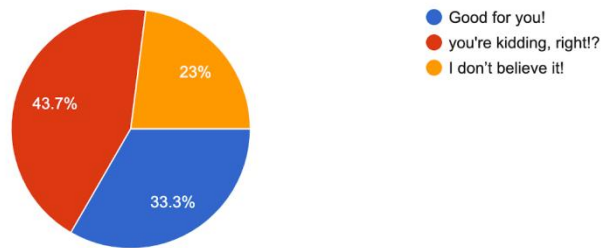


Figure 8: Pie chart showing percentage responses for message, 'I am enjoying studies these days' with emoji 2

**C. Responses change according to emotion conveyed by the emoji rather than the meaning of statement**

As can be interpreted in most cases, in the presence of an emoji the participant responded according to the emotion of the emoji, irrespective of the emotion conveyed by the statement.

Example 1

I failed the math quiz 😞  
87 responses

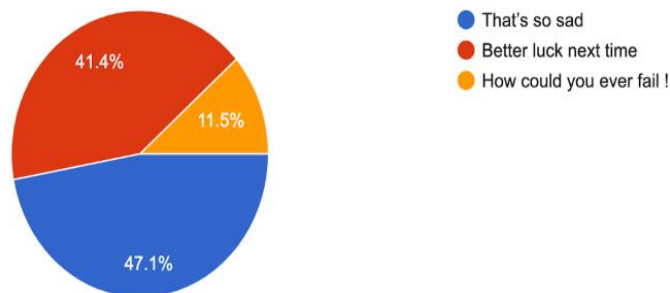


Figure 9: Pie chart showing percentage responses for message, 'failed the Maths quiz' with emoji 1

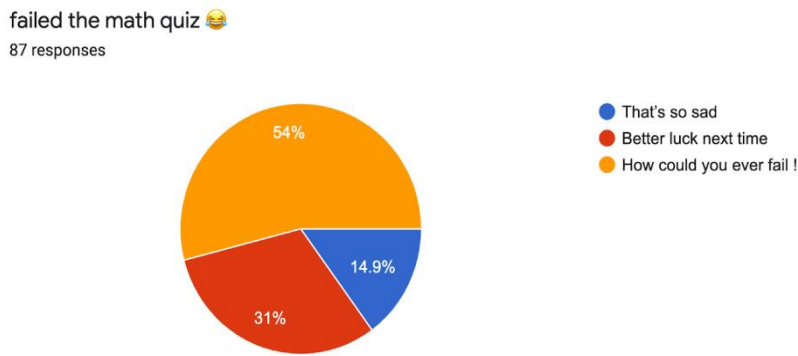


Figure 10: Pie chart showing percentage responses for message, ‘failed the Maths quiz’ with emoji 2

From the figures 9 & 10 above, it is evident that irrespective of the potentially serious nature of the statement ‘I failed the math quiz’, there is a 32.2% decrease in the response for the answer ‘ that’s so sad’ and solely because of changing the emoji from 😞 to 😂

**Example 2**

Another example signifying the change in response irrespective of the meaning of the statement can be seen in the above-given example. Here, the response of “wow!” increases from 11.5% to 69% as the emoji changes.

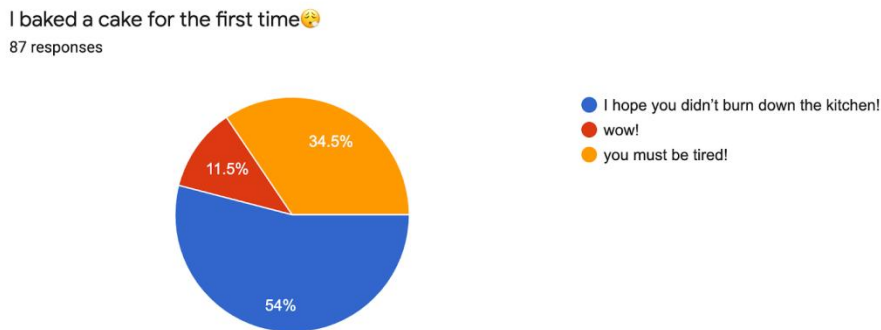


Figure 11: Pie chart showing percentage responses for message, ‘I baked a cake for the first time’ with emoji

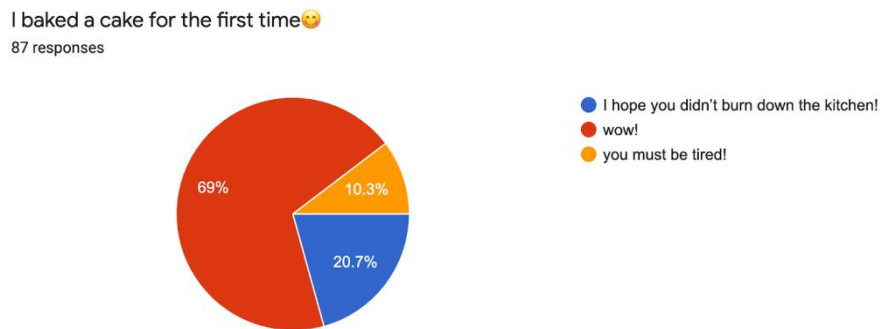


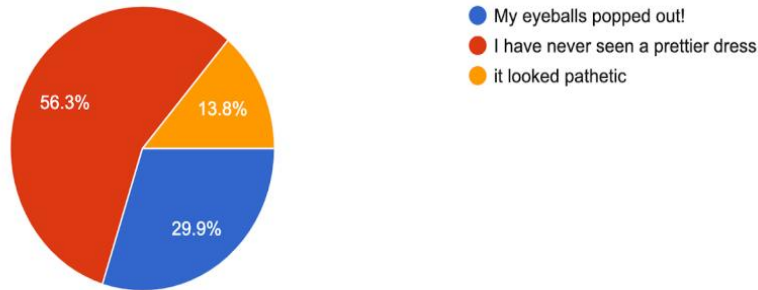
Figure 12: Pie chart showing percentage responses for message, ‘I baked a cake for the first time’ with emoji

**D. Influence of some emojis is more polarizing than others**

Furthermore, the influence of some emojis was more polarizing than others. For example,

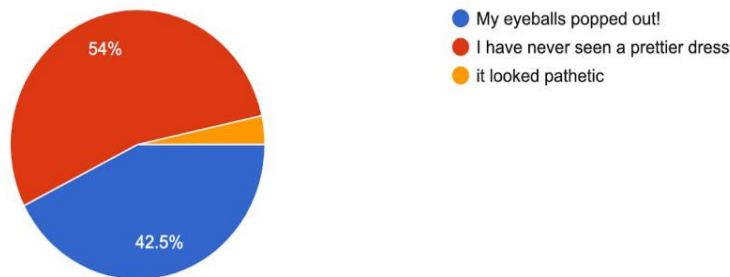
Example 1

Did you see the red dress she was wearing at the party  
87 responses



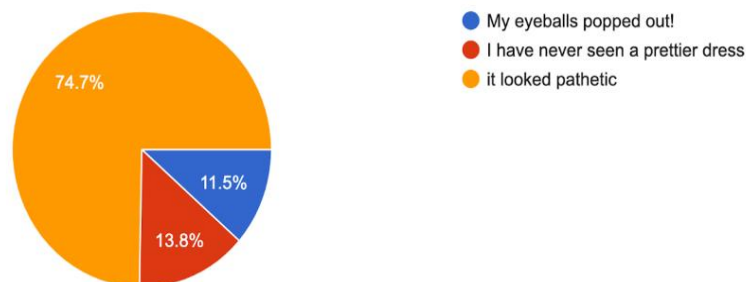
**Figure 13: Pie chart showing percentage responses for message, 'Did you see the red dress she was wearing at the party' without emoji**

Did you see the red dress she was wearing at the party 🤩  
87 responses



**Figure 14: Pie chart showing percentage responses for message, 'Did you see the red dress she was wearing at the party' with emoji 1**

Did you see the red dress she was wearing at the party 🤨  
87 responses



**Figure 15: Pie chart showing percentage responses for message, 'Did you see the red dress she was wearing at the party' with emoji 2**

In comparison to the figure 13 (question asked without emoji), there is a slight variation in percentages when the emoji 1 ‘😬’ is added (figure 14). Whereas, when emoji 2 is added ‘😞’(figure 15) there is a stark change in the responses with a 60.9% increase in the usage of the response ‘it looked pathetic’. This is also an example of the observation that in the presence of an emoji the participant responded according to the meaning of the emoji, irrespective of the meaning conveyed by the statement.

Example 2

My parents grounded me today!  
87 responses

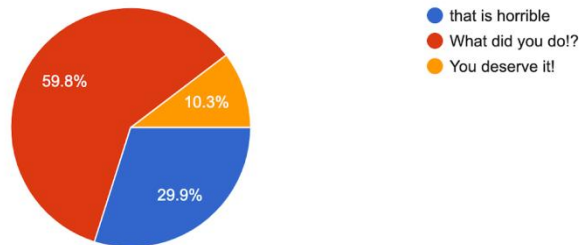


Figure 16: Pie chart showing percentage responses for message, ‘My parents grounded me today’ without emoji

My parents grounded me today! 😬  
87 responses

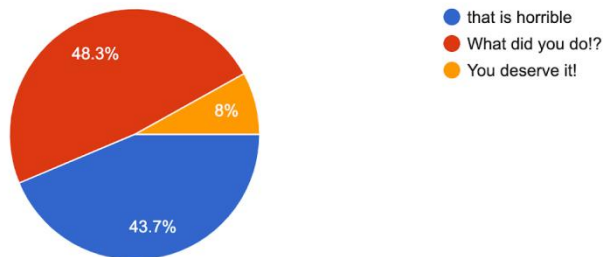


Figure 17: Pie chart showing percentage responses for message, ‘My parents grounded me today’ with emoji 1

My parents grounded me today! 😞  
87 responses

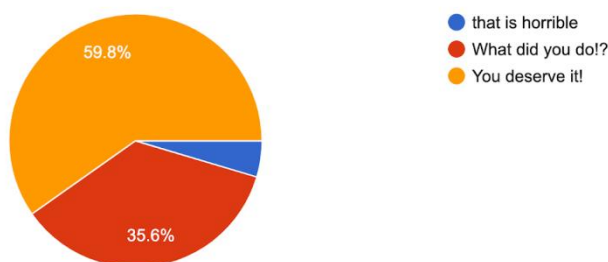


Figure 18: Pie chart showing percentage responses for message, ‘My parents grounded me today’ with emoji 2

From the pie charts, we can see the polarizing effect of 😊 emoji. The addition of this emoji changed the response of the statement “you deserve it!” from 8% to 59.8% as the emoji changed from 😡 to 😊. This shows the polarizing effect some emojis carry as they are able to alter the responses completely without relying on the meaning of the statement.

### VIII. Conclusion

The present study shows that the presence of emojis in a text message has a very powerful effect. A Message with or without emoji is perceived differently by the readers. Different emoji can change the perception of the same message to a great extent .Some emojis can polarize the response of the reader more than others .The impact of emojis can be understood by fact that reader respond to the message according to the emotion conveyed by the emoji rather than by the meaning of the text.

### Further scope for research

The present study shows that emoji’s can act as very powerful tool for non verbal communication in online medium especially in text messaging through social media.Since the perception of an emoji can differ according to age,gender,culture and many other factors so they should be chosen with caution.More such researches can improve our understanding on use of emoji’s in different areas like education,business etc.

### References

- [1]. Al Rashdi, Fathiya. (2018). Functions of emojis in WhatsApp interaction among Omanis. *Discourse, Context & Media*. 26. 10.1016/j.dcm.2018.07.001.
- [2]. Cramer, H., de Juan, P., Tetreault, J. (2016). Sender-intended functions of emojis in us messaging. In: *Proceedings of the 18th International Conference on Human-Computer Interaction with Mobile Devices and Services. MobileHCI 2016, New York, NY, USA*, pp. 504–509. Association for Computing Machinery. Retrieved from: Coyle, Maureen & Carmichael, Cheryl. (2019).
- [3]. Coyle, Maureen & Carmichael, Cheryl. (2019). Perceived Responsiveness in Text Messaging: The Role of Emoji Use. *Computers in Human Behavior*. 99. 10.1016/j.chb.2019.05.023.
- [4]. Duan, Jinyun, Xia, Xiaotong & Van Swol, Lyn (2018). Emoticons' influence on advice taking. *Computers in Human Behavior*. 79. 53-58. 10.1016/j.chb.2017.10.030.
- [5]. Jaeger, Sara & Xia, Yixun & Lee, Pui-Yee & Hunter, Denise & Beresford, Michelle & Ares, Gastón. (2017). Emoji questionnaires can be used with a range of population segments: Findings relating to age, gender and frequency of emoji/emoticon use. *Food Quality and Preference*. 68. 10.1016/j.foodqual.2017.12.011.
- [6]. Kannan, S & N, Shreya. (2017). Understanding Emoticons: Perception and Usage of Emoticons in WhatsApp. *Artha - Journal of Social Sciences*. 16. 49. 10.12724/ajss.42.4.
- [7]. Persson, N. (2019). Analysis of Emoji Usage : Differences in Preference and Function Across Genders (Dissertation). Retrieved from <http://urn.kb.se/resolve?urn=urn:nbn:se:hj:diva-43856>
- [8]. Völker, Juliane & Mannheim, Carolin. (2021). Tuned in on senders' self-revelation: Emojis and emotional intelligence influence interpretation of WhatsApp messages. *Computers in Human Behavior Reports*. 3. 10.1016/j.chbr.2021.100062.
- [9]. Willoughby, J. F., & Liu, S. (2018). Do pictures help tell the story? An experimental test of narrative and emojis in a health text message intervention. *Computers in Human Behavior*, 79, 75–82. <https://doi.org/10.1016/j.chb.2017.10.031>

Dr. Meenakshi Jindal, et. al. “Impact of Emojis on Message Conversation Through Social Media.” *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 27(03), 2022, pp. 20-32.