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RESEARCH ARTICLE

Emojis on Board: The Communicative Functions of Emojis in Saudi Females' WhatsApp Groups Interactions

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ABSTRACT

This study examines the communicative functions of emojis as used by Saudi females aged between (35-55) in twenty-five female-only WhatsApp groups' instant messages. These groups are chosen according to five different social purposes for which the group is created: sisterhood-related, close friendship-related, relatives-related, religion-related, and workplace-related. The data has been collected through screenshots of WhatsApp conversations naturally occurring between the females in these groups. The method used for checking the types of emojis and their frequencies is based on computer-mediated discourse analysis (CMDA) of 'coding and counting' (Herring 2004). All the different emojis were coded and counted and then were put to qualitative analysis on theories and methods of interactional sociolinguistics (IS) such as (Gumperz 1982; Dressner and Herring 2010). Results show that emojis have been used to express various kinds of emotions such as happiness, sadness, longing for old days, etc. Furthermore, they have been used to express different communicative functions of what Gumperz (1982) refers to as 'contextualization cues' such as congratulation on happy occasions, agreeing on others' comments, compliments, sharing information with others, gratitude, sending prayers, reminding the members of religious tasks, laughing, arguing, etc. The results also prove that emojis are context-dependent and are used to help users to approximate real daily face-to-face situations to others and to facilitate the different expressed emotions and communicative functions to receivers (Dressner and Herring 2010; Evans 2017).

KEYWORDS

computer-mediated communication, communicative functions, emoji, instant message, interactional sociolinguistics, Saudi culture, style, WhatsApp group.

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1. Introduction

1.1 Setting the Background

The advancement of technology has led to computer-mediated communication (CMC), where users of the internet communicate online with each other and share their news, photos, videos, etc. Since facial expressions, intonation, and body gestures are absent in this kind of discourse, the only means by which these non-verbal cues are expressed is through texting and using emojis in the interactional typed messages. Emoji is the transliteration of the Japanese word that stands for *e* 'picture', *mo* 'write', and *ji* 'character' (Bai et al. 2019). iPads and cell phones made it possible for those users to use the appropriate emoji according to the selected topic they find themselves engaged in. Emojis have proved to have semantic and emotional uniqueness in this virtual world of texting, and that is why they are ubiquitous online. They even got their own app<sup>1</sup> for checking all the categories an emoji can stand for, such as emotions, animals, body gestures, objects, things, flags, etc. (Rodrigues et al. 2017). They are used in the same way emoticons are used in all types of CMC such as e-mails, online texting, etc., and in all social networking apps such as WhatsApp, Facebook, Instagram, Snapchat, TikTok, etc. (Dresner and Herring 2010). They function as an illocutionary force when

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<sup>1</sup> (see [emojipedia.org](http://emojipedia.org))

found in online messages (Dresner and Herring 2010). As claimed by Alshenqeeti (2016), users use these visual symbols in the absence of non-verbal cues to make their intentions and emotions clear while messaging. Out of all the typed CMC discourse, this study focuses on WhatsApp groups' naturally occurring messages. As declared in Statista (2022)<sup>2</sup>, WhatsApp is the preferred application mostly used by Saudis in 2020 at about 26.25 million users, followed by Snapchat at about 15.5 million users. Those users can get together online and text, send emojis, voice notes, send pictures and videos in a one-to-one interaction or through creating WhatsApp groups. WhatsApp groups are made for different formal and informal social purposes, such as parent-child groups, friends' groups, workplace groups, studying groups, neighbors' groups, etc. This provides those users with a virtual place to interact and get along with others, even though each one of them is in their own place. These groups could be purely male, female, or mixed male-female groups according to the social relation among the members and the purpose of the group. This study chooses Saudi females aged (35-55) for many reasons. This specific age range is related to Saudi literate females who are found to interact through messages and use emojis. Saudi illiterate females are excluded because they only use WhatsApp to watch videos and to send voice notes and never use emojis. Also, this study excludes the young generation who uses Snapchat more than WhatsApp and has their own age-specific emojis (Koch et al. 2022). The data is collected from twenty-five female-only WhatsApp groups. These groups are based on five different social groups: sisterhood-related groups, close friendship-related groups, relatives-related groups, religious-related groups, and workplace-related groups (i.e., five WhatsApp groups for each social group).

## 2. Significance of the Study

It is to the best of the researcher's knowledge that there has been no interactional sociolinguistic study conducted on how emojis are used by Saudi females in naturally occurring online interactions in WhatsApp groups. Therefore, this study addresses the need to study the kind of emojis used by those females and the communicative functions they express.

## 3. Hypotheses

1. WhatsApp groups are a vital way of online communication. In the absence of non-verbal cues in this typed interactional CMC discourse, emojis are used within the message or stand-alone to help express different communicative functions and to approximate face-to-face situations.
2. Users of emojis are aware of the social purpose of the group, the relation of its members, and the topic discussed. Therefore, they choose emojis according to their intentions to denote specific communicative functions.
3. Emojis are context-dependent, and hence their meanings are understood accordingly.

## 4. Literature Review

Studying emojis would never start without the mention of emoticons. Emoticons are the precursors of emojis in CMC. Dressner and Herring (2010) found that emoticons can facilitate the intended meaning to receivers within the text. They further found that the emoticons in their data served three communicative functions: indicating positive attitudes, marking irony and jokes, and hedges. Emoticons have also been found to be 'highly context-sensitive' in a study made on native and non-native speakers of English (Vandergriff 2013). Those emoticons indicated emotions and signalled illocutionary force in the dyadic chats held between those students. Emojis, the successors of emoticons, have become so widespread in online interaction, and that is the reason why Evans (2017) refers to them as the 'new universal language'. In a study made on the first large-scale emoji used by the University of Michigan (2017)<sup>3</sup>, it was found that Face with Tears of Joy (😄) was the most used. Both the Red Heart (❤️) and Heart Eyes (😍) emojis ranked second. Furthermore, users of those emojis differed: French were the most to use the Heart emoji (❤️) than other users. Other nations such as Mexico, Chile, Argentina, and Colombia used negative emojis. This marks a very important factor in relation to how emotions are expressed by different societies and how these societies are perceived by the emojis used by their citizens. Apparently, there have been many studies done on emojis from many scientific fields. For example, in a computer behavior contextual account study made by Kaye et al. (2016), users found that using emojis is related to having a relaxed mood and to expressing themselves online with great ease. As to linguistic studies, I will list some studies that analyzed emojis in online interaction bearing in mind that studies on emojis in Arabic are scarce and still in their infancy. Albawardi (2018), studying Saudi females' digital practices online, found that those females use emojis to manage interpersonal relationships among them. Al Rashdi (2018), in her interactional sociolinguistic study on two Omani male-only and female-only WhatsApp groups about the functions of emojis, found that emojis indicate not only expressing the user's emotions but what Gumperz (1982) calls 'contextualization

<sup>2</sup><https://www.statista.com/statistics/1202797/saudi-arabia-number-of-messenger-app-users-by-app/#:~:text=In%202020%2C%20the%20messenger%20application,year%20was%20about%2025%20million>

<sup>3</sup> <https://news.umich.edu/emojis-how-we-assign-meaning-to-these-ever-popular-symbols/>

cues' such as indicating approval, celebrating with others, openings and closings of conversations, fulfilling a request, etc. In a comparative sentiment analysis study of emojis between Arabic and European languages, it has been found that emojis related to hearts, body language, and facial expressions are found to be consistent. However, emojis related to nature, objects, and symbols were found to be inconsistent, with a high frequency of inconsistency with food emojis (Hakami et al. 2021). From a pragmatic point of view, Aull (2019) studied emojis exchanged between a teacher and her L2 English students and found that both use phatic communication in their WhatsApp texting to express different social functions, of which greeting is one. In another pragmatic study on emojis by Pakistani users of Facebook, Kazmi et al. (2019) found out that the young generation finds that emojis make it easy for them to express emotions and feelings, while older people find that emojis are a serious threat to the roots of their language. In a study in relation to gender differences, Butterworth et al. (2019) found that the emotional interpretation differed when the same emoji was sent by both males and females. Culture has also been researched in relation to emojis. It has been found that some emojis are culture-specific (Sadiq et al. 2019; Ljubešić and Fišer 2016), and they differ not only between nations but within the same culture as well (Barbieri et al. 2016a). There are many emojis which are culture-specific such as those related to the Japanese culture: sushi (🍣), a bowing man (🙇), etc. Misunderstanding the meaning of an emoji has been studied as well in relation to the many different platforms such as IOS and Android. It has been found that the ones used on the IOS platform were more clear, attractive and meaningful than the Android platform (Rodrigues et al. 2017). Emojis, as visual symbols that expressed different types of emotions, were classified into three categories by Novak et al. (2015): positive, neutral, or negative, according to how they were emotionally used while texting. Novak et al. (2015) suggest that emojis can communicate specific emotions, such as anger, sadness, and happiness, unlike emoticons which fail to do so. Face emojis are found to be more used than non-face emojis when the sender wants to clarify their emotion (Riordan 2017). In regards to whether emojis can be looked at as an independent language or not, two opposed linguistic opinions are found: Na'aman et al. (2017) claim that emojis are regarded as an independent language since emojis possess visual rhetoric and text functions. On the other hand, Zhou et al. (2017) find emojis as text-dependent, rarely used independently and should be integrated within the text in order to form a complete meaning. In regards to online teaching and learning, it has been found that the use of emojis will help young students understand more what they have learned (Fane 2017). Previous research has shown that there are many purposes for using emojis. These include: adding additional emotional and contextual meaning to the text, giving more attractiveness to the message sent when received by others, helping to adjust tone, adding friendliness and humor, engaging recipients, and helping to manage and keep interpersonal relationships (Cramer et al. 2016; Kelly and Watts 2015; Chairunnisa and Benedictus 2017; Albawardi 2018). Gawne and McCulloch (2019), on the other hand, claim that the meaning of an emoji differs according to the context. Emojis are identified by Collister (2015) as discourse markers within a text. (Bai et al. 2019: 4) consider emojis as the most used and standardized in regards to all symbolic language (i.e., smiley, emoticons, emoji, and stickers). Another study by Danesi (2016) found that written communication is irreplaceable by emojis; however, emojis are used to add friendliness of tone and humor. Cramer et al. (2016), studying the purpose Americans use emojis, found that there are many purposes, such as: adding a tone, providing extra emotional information, maintaining relationships, and engaging recipients. Emojis are regarded as superior by (Barbieri et al. 2016b; Danesi 2016; Rodrigues et al. 2017) since they are rich in content, and they are speedy in input and expressiveness.

## **5. Data Collection and Methodology**

The data has been collected from naturally occurring messages in twenty-five Saudi female-only WhatsApp groups where emojis are used. These groups are created according to five social purposes: sisterhood-related, close friendship-related, relative-related, religion-related, and workplace-related. The corpus was collected between December 2022 and January 2023. At the time of the collection of the data, I noticed that most WhatsApp users were markedly shifting to using stickers and memes. The reason is that these are faster and funnier than using emojis, and they raise no misunderstanding as emojis. The researcher has contacted colleagues at work and acquaintances like neighbors, friends, and relatives to collect the data in addition to her own. The number of informants is ten females who are members of WhatsApp groups related to the five social groups listed above. They are members in these groups as a sister or an employee, etc. That was the only way to collect such data since these texts are private for their own users (Georgakopoulou 2011). Twenty-five groups were the source of collection of the data (i.e., 5 sisters' groups, 5 work groups, etc.). The reason behind this large number of different social groups is to collect as many emojis as possible and to identify their forms and the communicative functions they express. The number of participants in these groups ranges from 5 (i.e., the smallest in a group) reaching to 45 (i.e., the largest in a group). The researcher made sure that all these informants and the members in these groups were Saudi females whose ages ranged from (35-55). These informants were asked to send screenshot messages of texts where emojis are used from each social group with the names shaded to the researcher's email for ethical reasons. All the screenshot messages were typed in Saudi Arabic. Their total number is 93 texts. The texts were more than enough to start the analysis. It is important to note that the data in this study does not represent the Saudi digital population as a whole. It is only a sample of the emojis used in these WhatsApp female groups in general. The messages, along with their emojis, were transferred into five Word files with a detailed classification of the form of the emoji used and the emotion and communicative

function it expresses. Because of the cosmopolitan readers of this study, an English translation is provided. It is to be noted that since Arabic is written from right to left, emojis appear on the left side of these messages. Emojis in the English translation appear to the right. The absence of punctuation marks is a mark of the Saudi Arabic chat language. Consequently, the researcher added punctuation marks in the English translation to achieve the intended meaning. Using Herring's (2004) method of 'coding and counting' of computer-mediated discourses, emojis were classified according to their different forms and functions, and they were then counted. A table with three columns in a Word file was formed for each group. One column is for the form of the emoji used, such as 😊 (❤️) etc., the second column is for the number of its occurrence, and the third is for the communicative function it expresses. The data consisted of 57 unique emoji forms used. It is important to note that whenever an emoji is used successively more than once, such as 😊😊😊, it is counted as one instance of use. The reason is that the researcher believes that the repetition of an emoji is related to showing the extremity of that emotion or reaction, such as laughter (Al-Jahdali 2022). After the coding and counting stage had been completed, the data was put into an interactional sociolinguistic analysis (IS) following Gumperz's (1982) framework and studies such as (Dressner and Herring 2010). IS's main approach is to study how people use language when they interact in face-to-face settings. Based on Gumperz's (1982) framework, IS identifies certain relational signs that contribute to signal activities and discourse markers in those settings. These are 'contextualization cues' that are vital in helping others understand the semantic content and how each sentence relates to the previous or the latter one. Gumperz (1982: 131) lists many of these cues, such as lexical choices, formulaic expressions, syntactic features, moves related to opening and closing a conversation, and non-verbal features, such as facial gestures and expressions. In the absence of face-to-face interaction in WhatsApp typed discourse, this study will attempt to check whether emojis are used to play the role of what Gumperz (1982) refers to as 'contextualization cues' that help interlocutors to achieve the intended meaning as in face-to-face interaction. For the limited space, two representative examples are provided for each social group, followed by a table that lists all the emojis used and the kind of emotions or communicative functions expressed in that group (see Tables 1-5). It is to be noted that when the same/different emojis are used in one line of the message, they will appear in the table in their exact order as used. If, on the other hand, they are stand-alone, they will appear alone in the table. The time span of the messages, replies, and their effect is beyond the scope of this study. All the groups' names and members' names, internet links, and pictures were anonymized so that they were not identified by anyone. Hence, the names that appear in the translation are all fake except otherwise.

## 6. Data Analysis and Discussion

### 6.1 The communicative functions and emotions of emojis as used by Saudi females in WhatsApp groups interactions

**6.1.1 Sisterhood-related groups:** The data is collected from five different sisters' groups. These groups ranged from (5-7) members. The purpose of these groups is to get together, chat about daily house chores, such as cooking, cleaning, etc., update each other with all the important family news, work, gossiping, joking, hanging out, sharing recipes, etc. Such topics are usually carried out in face-to-face communication or over the phone. Those sisters interacted with each other almost daily in their group, and this explains why the data in this social group specifically was the highest of all social groups (i.e., 33 screenshots). The style of texting in all five groups is very relaxed, intimate, and informal, and this signals that their relationship is assumed to be strong. Analyzing the data, it has been found that different emojis have been used to express many different emotions and communicative functions in order to make them approximate real physical situations. Table (1) summarizes all the emojis used and the emotions, and the communicative functions they express. Example (1) consists of forward-backward messages between three sisters who are checking on each other in regard to their weekly gathering at their mother's house. It is typical in the Saudi culture that gathering at the parents' house is related in Islam to honoring them. Sisters, brothers, and grandchildren usually attend such gatherings where they chat, eat, enjoy their time, and perform this highly religious duty to their parents and siblings. Asmaa initiated the opening of the conversation in the group by asking about whether her sisters are available online or not and used the Eyes in One Direction emoji (👁️) as an approximation of the real situation when we search for others in a room through our eyes. She continues and reminds them that their mother is waiting for them for lunch at her house. Fatima indicates their presence in the group by texting and confirming everyone's presence on her behalf and then attaching a Big Smile emoji (😄) to indicate lightheartedness. She confirms that she will bring dessert and uses a Savoring Food Face emoji (😋) to indicate yumminess. She moreover asks Nora to bring a homemade Arabic coffee since she likes Nora's coffee and uses a Red Heart emoji and a Flying Kiss emoji (❤️💋) to indicate her deep love and appreciation for Nora. Nora responds back and apologizes for not being able to come to lunch since she has an appointment and uses a Weary Face emoji (😩) to express sadness for not being able to show up for lunch and a face with Thermometer emoji (🤒) to express her sickness. She further asks for suggestions of what she should bring along by using a Thinking Face emoji (🤔) to indicate wonder. Fatima responds back and asks her to bring a savory dish by using a Flying Kiss emoji (💋), indicating farewell and parting in face-to-face situations, followed by a Thumb Up emoji (👍) to show her confirmation. Example (1) is an example of how WhatsApp groups made it possible for those sisters to 'gather' and 'talk'. The type of texting and the emojis used indicate a live example of openings, talking about social topics, and then closing the conversation. It is an approximation of real face-to-face situations.

Example 1



Translation:

**Asmaa:** - Group members where are you? 🙄

- Are you all gathering at my mom's house on Thursday? She is waiting for us for lunch.

**Fatima:** - We are here. 😊

- Yes *inshaa Allah* (if God permits it), I will bring dessert. 😊

- Let Noura bring coffee. I like her coffee. ❤️👍

**Nora:** - Yes, I am coming *inshaa Allah* (if God permits it) but may be after lunch because I have an appointment. 😞😞

- What should I bring? 🤔

**Fatima:** - Bring a savory dish to be served with tea. 🤔👍

Example (2) is about Lamia, who is sharing her feelings of boredom with her sisters by starting with the phrase 'What a long afternoon!'. She continues describing how she did a lot of chores that require a lot of time, such as cleaning, cooking, changing the bed sheets, and turning on the washing machine, and the afternoon is still there! This detailed textual description is to associate her sisters with her day and to feel that intimate physical connection when someone wants to get something off their chest. She closed her text with a Face with a Tear emoji (😭) on a separate line to indicate her extreme boredom. Having this emoji typed as a stand-alone is to signal her emotional situation; hence it is understood in connection to the whole text.

Example 2



Translation:

**Lamia:** - What a long afternoon!

- I made lunch, cleaned my room, changed the bed sheets, and turned on the washing machine.

- All this in the afternoon!

- 😭

All the data analysed in these five groups (i.e., 33 screenshots) show that these messages are held in a very systematic and structured way as they are in real face interactions (Trudgill 2000). The back-forward texting is similar to a conversation taking place among the interactants. The style of texting is very relaxed, intimate, and informal. The topics raised are highly intimate, social, and personal (i.e., detailed descriptions of daily activities, sharing personal pictures and videos, updating each other with confidential news, etc.). This indicates the strong relationship among those sisters. The solidarity level among the members is an important reason for the high number of messages (the highest in all groups) and the varied nature of emojis used (the highest in all groups). Different emotions, such as happiness, love, sadness, boredom, annoyance, longing for the past, etc., are expressed (Table 1). Moreover, different communicative functions such as celebrations, indicating hot weather, sarcasm, yumminess, encouragement, innocence, agreement, sending prayers, indexing, illness, laughter, support, hope, motherly affection, teasing others, wonder, gratitude, etc. are expressed (Table 1). The use of emojis is important to consider here in these groups: (1) the same emojis (😭❤️) are used to denote different emotions, such as sadness (example 4) while longing for the past as in (example 29). (2) many emojis express their intended meaning without any ambiguity to users because they resemble exact facial expressions

such as (😋) to indicate yumminess (examples 12 and 27). (3) different emojis are used to express one emotion only: sadness (😞) as in (example 4), (💔) as in (example 11), and (😞) as in (example 29). This is to mark that users have the freedom to use emojis according to their preference and that they rely on the text which makes it easy for the group members to understand the intended meaning.

Table 1. List of emojis used and the emotions and communicative functions they express in sisterhood-related groups:

Emoji used	The communicative function/emotion it expresses	Emoji used	The communicative function/emotion it expresses
Ex 1 😊😏	sarcasm	Ex 17 😘	a motherly affection
Ex 2 🌞	hot weather	Ex 18 😊	liking the picture
Ex 3 😊❤️	love and support	Ex 19 😊😊❤️	deep appreciation back
Ex 4 😞💔	sadness	Ex 20 😊😞	Adoration
Ex 5 😏	sarcasm	Ex 21 🤍	emotional support
Ex 6 👍	agreement with others	Ex 22 😊😞😞😞	adoration
Ex 6 😞	longing for old days	Ex 22 ❤️	deep affection
Ex 7 😏	teasing others	Ex 23 😞	respond to something bittersweet
Ex 7 👍	encouraging others for hanging out		
Ex 8 💔🙏	asking for prayers to get well soon	Ex 24 👍	agreeing with the statement
		Ex 24 😂	laughing
		Ex 24 🤪	laughing
Ex 9 😊❤️	deep thanks and appreciation	Ex 25 😊	excitement
Ex 10 😂	laughing at others	Ex 26 🤪	laughing
Ex 11 💔	sadness	Ex 27 👁️	looking out for online members
Ex 11 😊	happiness	Ex 27 😊	light-heartedness
		Ex 27 😋	yumminess
		Ex 27 😊❤️	love
		Ex 27 😞😞	being ill and tired
		Ex 27 😞	wonder
		Ex 27 😞👍	farewell and confirmation
Ex 12 😋	yumminess	Ex 28 🙏❤️	thanking and appreciation
Ex 13 😞	boredom	Ex 29 😞💔	longing for the past
		Ex 29 😡	annoyance and displeasure
		Ex 29 😞	sadness
Ex 14 😏😏	sarcasm	Ex 30 😂	telling a joke



number of data collected and the high number of emojis used. The texts are an approximation of real face-to-face interactions. The duplication of letters is also an indication of intense emotions. Using diminutive names also shows the close and intimate relationships among those friends. Those friends text and use emojis to help them show their different feelings and communicative functions (Table 2). Emotions expressed in these groups include love, peace, sadness, longing for the past, deep appreciation, missing someone, pleading, and shock. In addition, different communicative functions, such as concern, laughter, approval, sending prayers, congratulations on religious occasions, kissing, etc., are expressed. The emojis are important to consider here according to their use in these groups: (1) the same emoji is used to denote different communicative functions and emotions, such as (😂) to indicate dying out of laughter as in (example 4) while sadness as in (example 6). (2) Emojis that express their intended meaning without any ambiguity of meaning to users, such as (💋) to indicate kissing as in (example 23). (3) different emojis are used to express one emotion only: sadness (😞) as in (example 7), and (😭) as in (example 6). (4) Emojis which are culture-specific and get their meaning in relation to the culture as (🌙) in (example 10). The crescent moon marks the start of Ramadan for Muslims, and accordingly, the use of (🌙) raises no ambiguity at all for those users. In another context, (🌙) marks *good night*.<sup>4</sup> The data here indicates that users are free to use emojis according to their preferences and intended meaning. Recipients have no difficulty understanding the intended meanings as long as the text is available.

Table 2. List of emojis used and the emotions and communicative functions they express in close friendship-related groups

Emoji used	The communicative function/emotion it expresses	Emoji used	The communicative function/emotion it expresses
Ex 1 ❤️	concern	Ex 14 🌹 ❤️	Happy Eid
Ex 2 😂	something which is ironically funny	Ex 15 🌹 ❤️	deep appreciation
Ex 3 😊	responding to something great that happened	Ex16 🤗 🤗	missing someone dearly
Ex3 😍	in love		
Ex3 👍	agreement		
Ex 4 😂	dying out of laughter	Ex17 🌹	hoping everyone is doing well
Ex 5 😌	relief	Ex18 ❤️ 🤗	love and support
Ex 6 😭	sadness	Ex 19 👍	that things are going well
Ex 7 😞	Sadness	Ex 20 🤗	laughing at the response
Ex 8 🙏	sending prayers	Ex 21 😞	shocked at an uncomfortable situation
Ex9 🙏	saying a prayer	Ex22 🤗	laughing
Ex10 🌙	Happy Ramadan	Ex 23 ❤️ 💋	love and kisses
Ex 11 🤗	finding something very funny	Ex 24 😞 😞 😞 😞	pleading someone to stay
Ex 12 😂 😂	dying out of laughter	Ex 24 ❤️	love
Ex13 😞	longing for old days	Ex 25 😂	dying out of laughter

**6.1.3 Relative-related groups:** These are five female-only groups of cousins. The number of members ranges from (15-25). Having to abide by the social conventions, which is an important cultural and religious matter, the main purpose of these groups is updating its members with family news. These include engagements, wedding invitations, giving birth, celebrating religious occasions, death news, etc. The total number of screenshots collected is 13. Their kind of relationship is semi-formal since each of the members has her own social life and relations. The style of texting in all these groups is semi-formal as well. Table (3) summarizes all the emojis used and the emotions and communicative functions they express. Example (4) is an example of a rather semi-formal style of texting between the members. Fatema starts with a formal salute in Modern Standard Arabic (MSA), which is

<sup>4</sup> <https://emojipedia.org/crescent-moon/>.



the High (H) and most formal variety in the Arab world. Her formal salutation is an indication of the semi-formal relationship that is held between them. She then announces the birth of her granddaughter. It is an Islamic tradition to thank God for his blessings before the announcement of good and happy news. It is a sent metamessage (Bateson 1972) that (we, as a family, are happy for the birth of our granddaughter). She then assures them that both the mother and her daughter are in good health condition. She then sends her prayers for both the mother and the daughter, which is an Islamic custom to do on such occasions. Fatema's announcement here is similar to the same job carried out through phone calls to announce such happy occasions. The members of the group started congratulating Fatema by first replying back formally to her greeting, congratulating her, and sending their prayers as well. Manal used a Girl emoji (👧) to refer to the newborn girl and a Heart with a Ribbon emoji (💝) to indicate a sealed heart similar to a sealed present. Hanan sent a face with Heart Eyes emoji (😍) to indicate her happiness for the good news and a Red Heart emoji (❤️) to show love. Maha used a Face with Heart Eyes emoji (😍) to express her happiness for the good news. Example (5) shows how the communicative function of congratulation is carried out by the use of different emojis. Each of these members congratulated them in her own way and according to her preference. The use of emojis in this example is to celebrate this happy occasion and to beautify the verbal text so that it is not interpreted as negative or lacking excitement. Hence, the single use of emojis shows the semi-formal congratulation that has to do with paying a social duty to Fatema, her daughter, and the newborn baby.

Example 5



**Translation:**

**Fatema:** - Peace be upon you, thanks to God, (Noor) gave birth to a baby girl and she (the baby) is fine and her mom as well, I ask God to bless her and make her one of his righteous worshippers.

**Manal:** -and peace be upon you, a thousand thousand congratulations, may God bless you on her, and thank God for Noor's safety. 🧑‍👧💝

**Hanan:** -and peace be upon you, a thousand thousand congratulationnnns, God has willed it and blessed it.

- May God keep her safe. 😍❤️
- And thank God for Noor's safety.

**Maha:** -A thousand thousand thousand congratulations, and thank God for Noor's safety. 😍

- May God make her a newborn full of happiness and make her dutiful to her parents.

Example (6) is an example of how the members celebrated Eid Al-Adha in the group. In real life situations, people tend to repeat words and phrases to each other to show rapport and solidarity (Tannen 2007). In addition to that, in Saudi female culture, females tend to kiss each other on their cheeks to show this dear celebration to each other. In example (6), Nejwa starts by congratulating the members in MSA (indicating the semi-formal relation). She shows her celebration by using a White Heart, a Flower, a Party Popper, and a Confetti Ball emojis successively (💖🌸🎉🎊). Emojis give the opportunity to celebrate virtually in a faster and easier way because they are at hand and afford nothing compared to real life, where there are usually preparations of flowers, balloons, party poppers, confetti balls, etc. In a virtual celebration, it is presumable that repeated uses of these emojis should express rapport and solidarity easily, especially since they financially cost nothing. However, because of the semi-formal relation between the interactants, a single use of (💖🌸🎉🎊) emojis has been used rather than multiple ones. The user knows that the verbal text alone would be interpreted negatively, and hence emojis are used to soften the text between the members and to indicate celebration. However, not using multiple emojis indicates that it is a social task to be done. These emojis fail to show any kind of excitement at all. The members of the group congratulated back verbally in a formal and reciprocal way (a signal of the semi-formal relation) and used emojis as well. Reema used two Roses (🌹🌹) for the celebration. Fatema sent a Bouquet of Flowers (🌸), and Ghada used two Red Hearts (❤️❤️). The two instances of the use of emojis are a reflection of the user herself and her way of celebrating her relatives, which is still distant and plain.

Example 6



**Translation:**

< sticker > (celebrating Eid Al-Adha)

**Nejwa:** - I congratulate you on the blessed Eid Al-Adha, may God brings it back to us with blessings, and may God accepts from us and you (pl.) good deeds and wishing you (pl.) every year with great health. 🤍 🌸 🎉 🎊

**Reema:** - and you (pl.) are in good health and peace, Amen. 🌹 🌹

**Fatema:** -and you (pl.) are all fine, Amen. 🌸

**Ghada:** -and you (pl.) are all fine. ❤️ ❤️

All the data analyzed in this section show the use of the formal variety (MSA) in salutations and replies in most messages. This is to assure the kind of semi-formal and semi-distant relation. Even though the members are relatives and the assumption is that their relation should be stronger than that of close friends' groups, however, the data show the contrary. The style of texting ranges from semi-formal to formal. The topics are confined to updating family occasions and celebrating social occasions such as Hajj or Ramadan. Intimate topics, pictures, and videos have not been found anywhere in the data. The emojis used, and the emotions and communicative functions they express are far less than the previous two groups. Emotions in these groups expressed joy, wonderfulness, hope, frustration, dizziness, sorrow, and happiness. Different communicative functions were found, such as laughter, gratitude, congratulations on the birth of a new born baby, and wishing well being to others (Table 3). The use of these emojis varies as (1) the same emoji is used to denote different emotions such as (❤️) to express joy as in (example 3), wishes for wonderful days to come as in (example 4), and wishing a Happy new year as in (example 8). (2) Many emojis express their intended meaning without any ambiguity to users, such as the loudspeaker emoji (📢) to indicate announcing loudly (example 12). (3) different emojis are used to express one emotion, such as congratulating a newborn baby girl (👶❤️), (👶❤️), (👶❤️) in example (6). The emojis were used once or twice maximum in showing celebrations, and this contradicts real-life situations. No duplication of letters has been found in the data as well. This is another strong proof to show the semi-distant relation and the semi-formal relation among those relatives.

Table 3. List of emojis used and the emotions and communicative functions they express in relatives-related groups:

Emoji used	The communicative function/emotion it expresses	Emoji used	The communicative function/emotion it expresses
Ex 1 🤪	laughter	Ex 7 😞	sadness
Ex 1 😂	funny situation		
Ex 2 🤪	laughing at a joke	Ex 8 ❤️	hoping for a good new year
Ex 3 ❤️	heart is filled with joy after a great experience	Ex 9 🤍 🌸 🎉 🎊	wishing for a Happy Eid Al-Adha
Ex 3 🌸	how wonderful the day has been	Ex 9 🌹 🌹	wishing for someone's well being
		Ex 9 🌸	wishing for someone's well being
		Ex 9 ❤️ ❤️	wishing for someone's well being
Ex 4 ❤️	hoping for wonderful days often	Ex 10 🇬🇧	UK flag
Ex 4 🌸	gratitude for the lovely gifts		

Ex 5 🤪	being playful	Ex 12 🗣️	indicating that the user's message is said loudly.
Ex 6 😞	frustration		
Ex 6 🤯	dizziness		
Ex 6 👩👶❤️	congratulating on the birth of a new baby girl	Ex 13 ❤️🥰	enthusiasm and happiness
Ex 6 🥰❤️	congratulating on the birth of a new baby girl		
Ex 6 🥰	congratulating on the birth of a new baby girl		

**6.1.4 Religion-related groups:** The members of these five different groups ranged from (11-20). They are gathered because of one absolute goal, which is religion. They read, memorize, and recite Quranic verses to each other and share religious news and updates. The total number of messages collected is 14. Their relationship is semi-formal with each other since each of them has her own social life and relations. Their group is not active compared to the sisters-related groups, for example. Table (4) summarizes all the emojis used and the emotions and communicative functions they express. Example (7) clearly describes a typical group that is created for religious purposes. The teacher, who is the leader of the group and one of its members, voluntarily takes the lead to do the job of checking on the members. She starts her text with the formal Islamic greeting *assalamu 9alaikum* (Peace be upon you (pl.)). She directly follows her greeting with another informal greeting *Good morning* followed by a Yellow Heart emoji (❤️). The double-instance greeting is important to note here: the first salute is to indicate the religious relation between them, and the informal greeting is to show solidarity. Apart from its meaning in Snapchat as #1 BF Snapchat, the Yellow Heart emoji (❤️) is used for a relation that denotes the sincerity and pure intentions among the members of this group since it is a sincere and, for God's sake, relation. This is an evidence that users can attach their own meaning to an emoji they choose. She continues and asks about their health as a marker of social connection. She then notifies them of what they are to be assigned to do. She assigns *Juzu' 9amma* (the 30<sup>th</sup> Chapter in the Holy Quran) and uses a Folded Hands emoji (🙏) as a prayer for sending blessings. She further confirms that it is better to start the schedule of memorizing together. *Juzu' 9amma* is the chapter she chooses, and she uses a Thumbs Up emoji (👍) as a confirmation. Awatef greets her back in the informal salutation *SabaaH ?annuur* (Morning of light) and uses an emoji of Two Small/Big Hearts (❤️) to denote her respect and love. She agrees to the task raised by the teacher by texting the well-known kind of confirmation expression? *inshaa Allah* (if God wills it) and uses a Thumb Up emoji (👍). *?inshaa Allah* is a vital interactional ritual used by Muslims whenever they want to express their hopes and tasks to be done in the future. Nawal then greets back with an informal greeting *SabaaH ?alward* (Morning of roses), to show solidarity and uses two emojis: a Prayer Hand emoji (🙏) as a sign of prayers and a Bouquet of Roses emoji (🌹) to indicate her respect and love. She confirms that she has already started and would be able to catch up with them by using a Red Heart emoji (❤️) to indicate a love of what she is doing and a smiling face emoji with Open Hands (😊) as an indication of willingness. The teacher replies back with *mashaa Allah* (God willed it), which is another vital interactional expression of gratitude and congratulation said by Muslims on happy and blessed occasions. She attached the expression with an emoji of Clapping Hands (👏) to signal encouragement and support. Nawal thanks her teacher formally to signal their teacher-student relation and then uses two emojis: a Kissing Face emoji (😘) to signal her kissing the teacher out of joy (as in face-to-face farewell in Saudi culture) and a Smiling Face with Hearts emoji (😍) to signal love and respect to her teacher. The two emojis are used to close the conversation.

## Example 7

**Translation:**

**Miss Marwa:** - Peace be upon you and blessings of God.

- Good morning. 🧡

- I hope everyone is doing well.

- Today we will start with *Juzu' 9amma*. 🙏

- Let us start at the same time so we will all be on schedule. 👍

**Awatef:** - Morning of light (Good morning). ❤️

- *inshaa Allah* (f God permits it). 👍

**Nawal:** - A morning of roses, instructor. 🌹🙏

- I have already started a few days ago, and *inshaa Allah* (if God permits it) I be will with all of you on schedule. ❤️😊

**Miss Marwa:** - *mashaa Allah* (God willed it). Good. 🙏

**Awatef:** - Alright, instructor. Thank you. 🙏😊

Example (8) is an example of the tasks carried out in the group and how the members acknowledge achievements and the tasks they have done. Leader Eman announces great news by saying that Afaf has finished reciting the assigned chapter. She refers to her as (the dear) in order to show closeness and dearness. She then surrounds her name with seven duplicated instances of Two Big/Small Heart emojis ((❤️❤️❤️❤️❤️ Afaf ❤️❤️❤️)). This duplication of the emoji is to send a metamessage (I am extremely proud of Afaf.). Her extreme pride and joy are shown by a combination of both textual and visual expressions (i.e., the name is surrounded by seven instances of small-big heart emojis). She further explains that Afaf did a make up for the past weeks and uses a Red Rose (🌹) to indicate appreciation for the work she did.

## Example 8

**Translation:**

**Eman (the admin):** - She finished recitation, the dear

❤️❤️❤️❤️❤️ Afaf ❤️❤️❤️

- She made up for the past two weeks. 🌹

- the rest when are going to recite? is it now or in the afternoon?

**Dr. Maria:** - Is it possible now?

- !!

**Eman (the leader):** - until the afternoon, if I did not log in, ring me and I will open the Whats (WhatsApp).

Even though the members in these groups are not relatives, their kind of relationship is closer and stronger than the relative-related groups because of the elevated purpose they are gathering for which is reciting and memorizing Quran and updating each other with religious news. In Islam, this kind of relation is divine, and Muslims believe that they get lots of favors in the afterlife for such a divine relation. The use of the formal salute is a mark of the Islamic salutation, and following it with the informal salutation is to signal such strong and close relation among its members for the purpose they are gathering for. The texting and emojis found

express lots of emotions such as divine love, gratitude, sadness, tasks to be done, sending lots of prayers, etc. Moreover, different communicative functions, such as expressing a divine relation, sending prayers, agreement, gratitude, kissing, reminding others to read Quran, etc., are expressed (Table 4). The emojis used in these groups are: (1) the same emoji is used to express different emotions, such as sadness (❤️), as in (example 7), while facing difficulties, as in (example 4). (2) Many emojis express their intended meaning without any ambiguities to users, such as (👍) to indicate agreement as in (example 1). (3) different emojis are used to express one communicative function only, such as wishing a good morning to others as (❤️) in (example 1), (🌸🙏) in (example 1), and (🌸) in (example 5). (4) An emoji is used, and the user attaches their own meaning as (❤️) in (example 1) to denote a divine relation. (5) emojis are used as decorative markers at the end of a text with no meanings at all, such as (👉👉) in (example 6). (6) emojis used to surround a word within a verbal text as (❤️❤️❤️❤️ Afaf ❤️❤️❤️) in (example 14). It is for the best researcher's knowledge this instance of emojis' use surrounding the text has not been seen in other studies. This marks the flexible nature of emojis that are available to users and that users have the full choice to use emojis according to their preferences and intentions. The accompanying text makes it easy for the members to understand the intended meaning.

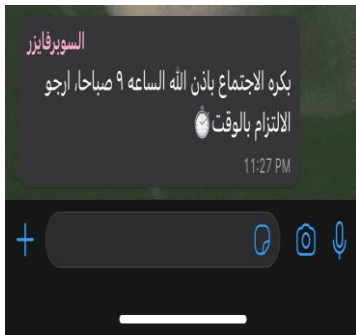
Table 4. List of emojis used and the emotions and communicative functions they express in religion-related groups:

Emoji used	The communicative function/emotion it expresses	Emoji used	The communicative function/emotion it expresses
Ex 1 ❤️	a divine relation with the members	Ex 8 🙏	appreciation for doing the required task.
Ex 1 🙏	sending blessings		
Ex 1 👍	agreement		
Ex 1 ❤️	wishing a good morning		
Ex 1 👍	agreement		
Ex 1 🌸🙏	wishing a good morning		
Ex 1 ❤️😊	love and willingness		
Ex 1 👏	excitement for the accomplishment		
Ex 1 😊💋	gratitude and kisses		
Ex 2 😊	gratitude	Ex 9 ❤️	Amen
Ex 3 ❤️🌸	saying a prayer and wishing for people's well being	Ex 10 🙏	Amen
Ex 4 ❤️	facing difficulties	Ex 11 👍	writing a prayer
Ex 5 🌸	wishing a good morning	Ex 12 🙏👉	reminding people to pray and read the Quran
Ex 6 👉👉	(used at the end of the text as a decorative marker)	Ex 13 ❤️	appreciation and being proud also
Ex7 ❤️	sadness	Ex 14 ❤️❤️❤️❤️❤️❤️❤️❤️	extreme excitement and pride for achieving the task
		Ex 14 🌸	appreciation for the work done

**6.1.5 Workplace-related groups:** These five groups consist of colleagues at the same workplace. The main purpose of creating these groups is to update its members with all the news that is related to the workplace. These include new rules, promotions,

work tasks, etc. Furthermore, important social news in relation to those colleagues, such as engagements, wedding invitations, giving birth, celebrating religious occasions, etc., are also announced from time to time. The number of members is the highest in all groups (25-45). Despite the large number of members found in all five groups, the data collected in these groups are the least in number (i.e., 8 screenshots). The reason for this small number of data is related to their formal relation with each other and that their texts are seen by all members. The rest of the data has been found to have no instances of emojis use and were plain texts and consequently were excluded from data collection. The justification for not using emojis at all is that emojis are seen as beautifying the text, informal, and accordingly it is an unneeded task since they are busy and formal. Their style of texting is found to be formal in MSA and some instances of formal (L) variety use. Table (5) summarizes all the emojis used and the emotions, and the communicative functions they expressed. Example (9) shows the formal style of texting. The supervisor does not start her text with a greeting as expected. This is to signal her seriousness, formality, and shortage of time. She directly announces the meeting time and date for the members. She further stresses the time of the meeting and punctuality and uses a Ten O'clock emoji (🕒). Even though the meeting is at 9:00 and not 10:00, the emoji is used to represent time in general.

#### Example 9



#### Translation:

**Supervisor:** - The meeting is tomorrow *inshaa Allah* (if God wills it) at 9:00 o'clock, punctuality is required. 🕒

Another formal workplace text is seen in example (10). The school principal starts right away by giving the required task needed from the members. She notices that she did not greet the members and rectifies this by using a rhyming sticker of 'Good evening accompanied with roses' scent'. Using a sticker is faster and easier than texting and is much preferable for its colors and beautiful font. She then continues texting formally by using *fadhlan* (kindly), which is highly formal and is in the H variety in a line alone to attract their attention. She continues and writes that they should pay attention to the important notes sent through *?almanaSSah* (the education platform). She uses the Index Finger Pointing Up emoji (👉) as a linking device that draws attention to the previous important note posted earlier in the text. The whole text is carried in MSA, and it is highly formal to indicate formality and seriousness.

#### Example 10



#### Translation:

**School principal:** - All items in the teacher's account must be activated. No icon should be left out unfilled.

<sticker > (Good evening accompanied with roses' scent)

- Please pay attention to the notes received from the supervisor of *?almanaSSah* (the education platform) 👉

These groups are a manifestation of the real-life workplace. The analysis of data shows that the type of texting and emojis used are highly formal and to the point. The members do not share any personal information, and their topics are mostly work-related. They talk about meeting times, required tasks, emails, etc. MSA is used extensively because it marks seriousness and formality. Members are found to read typed notes and rarely reply back because it is a task that they have to accomplish. These messages play the same role as messages sent through emails or ordered by the boss/principal etc., where the employer takes the order and does the job. Emojis in work-related groups were found to express communicative functions mostly related to job tasks, such as: pointing to an important note, stressing tasks to be done, meeting times, sending emails, expressing gratitude for work done well, and agreement on a raised point. Emotions have not been found anywhere in the data. Celebrating religious occasions was found to be formal as well and expressed through using one unrepeated instance of a Flower emoji (🌹), while other members preferred

texting in MSA and used no emojis at all. A flower emoji is far less emotional than a heart or a bouquet of flowers, for example. Even though these groups are females only, the heart emoji has never been used, and this signals the kind of formal and distant relation among them (Table 5). The emojis used in these five groups were the least in number of all groups (8 stand-alone emojis). This rare use of emojis proves seriousness, formality, and the distant relation among the members. This is to prove that emojis express more communicative functions and less, if not emotions at all, than emoticons, as has been studied and approved in workplace emails by Skovholt et al. (2014).

Table 5. List of emojis used and the emotions and communicative functions they express in work-related groups:

Emoji used	The communicative function/emotion it expresses	Emoji used	The communicative function/emotion it expresses
Ex 1 🕒	the time of the meeting	Ex 5 👉	pointing to the statement above
Ex 2 🌸	wishing a Happy Ramadan	Ex 6 💎	importance of the note
Ex 3 👍	work well done	Ex7 👍	agreement
Ex 4 🌸	gratitude	Ex 8 📧	to send the required task via email

**7. Conclusion**

This study has provided evidence on the kind of emojis used and the emotions and the communicative functions they express as used by Saudi females aged (35-55) in twenty-five WhatsApp groups' interactions. Emojis were found to express different kinds of emotions, such as happiness, sadness, pride, boredom, love, etc. (Tables 1-5). The data analyzed agrees with Novak et al.'s (2015) findings in that emojis express more specific emotions other than that expressed by emoticons. In addition, emojis indicate several communicative functions such as indexing, celebrating occasions, performing tasks, agreement, appreciation, etc. (Tables 1-5). The purpose of creating the social group, the solidarity level among its members, and the topic of discussion contributed to the kind of emoji used, the emotion it expressed, the communicative function/s indicated, the formality style, and the language/dialect used. It has been noted that as the formality level and solidarity distance rise, emojis are less-used, are more direct, and are less varied. Emotions have not been found anywhere in work-related groups; rather, emojis that expressed work-related communicative functions have been found (Table 5). On the other hand, when the informality and solidarity level rise, emojis were used more with a great variety to express different emotions and communicative functions. It has been found that intimate and social topics are discussed in closely connected groups (sisters and close friends), semi-formal and semi-intimate topics are discussed in semi-distant groups (religious and relatives), while formal, distant, and job-related topics are discussed in distant groups (workplace). MSA and formal style of L variety have been found to be used to indicate seriousness, formality and the distant relation between the members of a group. The informal L variety of Saudi Arabic has been used to indicate solidarity and friendliness, with instances of doubling of letters to show the intensity of emotion. Highly-connected social groups have been found to have a higher number of messages and a higher use of varied emojis expressing a high number of emotions and communicative functions despite their low number of members. Formal and semi-formal groups have been found to have a low number of messages and emojis despite the high number of members. All the emojis were found to be dependent on the text in all these social groups even when the emoji was used stand-alone, and this falls in line with the findings of Al Rashdi (2018: 125) and Darics (2013). Analysis done on the data showed that recipients understood the meaning of emojis in reliance on the text and apparently carried on by replying back smoothly in all groups either by texting, using emojis, reading the messages and not texting, or not using emojis at all as in the case of workplace groups. Emojis were used in different ways: (a) one emoji is used to express different emotions or communicative functions, (b) one emoji that stands for the intended meaning directly without any kind of ambiguity, (c) different emojis are used to express one emotion or one communicative function, (d) emojis which are culture-specific in their meaning, (e) emojis that get their meaning according to the user intention, (f) emojis that are used as a decorative sign and have no meaning at all, and (g) emojis that are used to surround a typed text. This is to show that the functions of emojis are complex, multi-layered, and serve various and overlapping functions according to the wish of the user (Al Rashdi 2018:123) and (Darics 2013). Also, this study has provided evidence that users use these emojis voluntarily as they wish and that the emojis they use might not represent real emotions or facial expressions; rather, they work as intentional communicative signals of emotion (Al Rashdi 2018:119). This study agrees with (Riordan 2017) in that face emojis are found to be more used than non-face emojis when the sender wants to clarify their intended emotion. Moreover, it has been found that emojis are used for many purposes: expressing emotions, indicating various communicative functions, beautifying the text with colors (Sampietro 2020), helping to frame the intended meaning with

the accompanying verbal utterances to interactants, adding friendliness and humor (Danesi (2016), establishing alignments among members, as a decorative sign, indicating message tones, structuring exchanges of group interactions, managing interpersonal relationships among the members (Albawardi 2018), to feel connected (sisterhood-related and close friendship-related), to share intimate and detailed news (sisterhood-related), to abide with societal conventions and tasks (relative-related), creating a divine relation (religion-related), to reduce the seriousness and add some color to the text (workplace-related). It has been found that informants, including the researcher herself, are members of many social groups due to their simple technical creation. Al Rashdi (2018: 117) stated that WhatsApp has replaced the role of telephone calls for its low cost among Omanis. In the data analyzed, there are other important reasons for WhatsApp group preference among Saudi females: the availability of members in the group at all times (even if they are offline, they can still read the message/s anytime), the online duration of the message compared to oral utterances that expire once they are said, overcoming obstacles of not meeting members face to face, the easy connection with people while being in one's own place, and economizing time for the sender/s and receiver/s. This adds that WhatsApp groups made it possible for users to approximate daily face-to-face situations by using back-forward messages and emojis. Emojis, an essential marker of the digital world, made it possible to overcome non-verbal cues in most instances of WhatsApp interactions.

### 8. Limitations and Recommendations of the Present Study

This study is a contribution to the gap of literature on Arabic communication-mediated discourse (CMD) in general and to Saudi Arabic CMD, specifically in WhatsApp groups interaction. It is confined to Saudi females aged between (35-55) in twenty-five different social WhatsApp groups. More studies are needed to examine emojis in online interactions on different platforms such as Twitter, TikTok, Facebook, etc. Studies on the young generation, since they are the internet generation Alajmi (2014), are needed to explore the kind of social platforms they use, the kind of emojis they use, and the emotions and communicative functions expressed. Also, studies are needed in relation to males-only and mixed males and females' groups. Such studies will contribute to the kind of emojis used, the meaning/s expressed, and whether there is any difference in relation to gender, age, and style. A sociolinguistic study is a great choice to explore how illiterates deal with WhatsApp and computer-mediated messaging applications. It is beyond this study to check the differences in the use of different emojis in different groups to express one emotion, such as happiness, greetings, etc. The use of (🥰❤️), (👉❤️), to express deep appreciation and thanks is totally different from formal groups. Two questions need to be explored: Does each emoji have a different degree of expression? Are emojis capable of being classified as formal and informal? This study will also be available for universal comparative studies with different cultures, social media platforms, age groups, gender differences, solidarity levels, and formality levels. Such comparative studies will generate an established framework that will contribute to CMD in general.

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### References

- [1] Alajmi, S. (2014). Alarabtini: Alkitabah belarabiyah belahrof allatinyyah [Latinised Arabic: Writing Arabic with Latin alphabet]. In *Loghat alshabab alaraby fi wasayel altawasolalhadithah [Arab Youth's Language in New Social Media]*, (1), 7-26. Riyadh: King Abdullah Bin Abdulaziz International Center for the Arabic Language.
- [2] Albawardi, A. (2018). The translanguaging digital practices of Saudi females on WhatsApp. *Discourse, Context, and Media*, (25), 68-77. doi:10.1016/j.dcm.2018.03.009
- [3] Al-Jahdali, N. (2022). Laughing Online: A Morpho-Semantic Study on Typed Laughter-Derived Expressions Used in Hijazi Twitter and WhatsApp Instant Messages. *International Journal of Linguistics*, 14 (4), 88-119. doi:10.5296/ijl.v14i4.20160
- [4] Al Rashdi, F. (2018). Functions of emojis in WhatsApp interaction among Omanis. *Discourse, Context, and Media*, (26), 117-126. doi:10.1016/j.dcm.2018.07.001
- [5] Alshenqeeti, H. (2016). Are emojis creating a new or old visual language for new generations? A socio-semiotic study. *Advances in Language and Literary Studies*. (7), 56-69.
- [6] Aull, B. (2019). A study of phatic emoji use in WhatsApp communication. *Internet Pragmatics*, 2 (2), 206-232. doi.org/10.1075/ip.00029.aull
- [7] Bai, Q., Qi, D., Zhe, M. and Maokun, Y. (2019). A Systematic Review of Emoji: Current Research and Future Perspectives. *Frontiers in Psychology*, 10, 2221. https://doi.org/10.3389/fpsyg.2019.02221
- [8] Barbieri, F., Espinosa-Anke, L., and Saggion, H. (2016a). Revealing patterns of Twitter emoji usage in Barcelona and Madrid. *Artificial Intelligence Research and Development*. (288), 239-244. 10.3233/978-1-61499-696-5-239
- [9] Barbieri, F., Kruszewski, G., Ronzano, F., and Saggion, H. (2016b). How cosmopolitan are emojis? Exploring emojis usage and meaning over different languages with distributional semantics. *Proceedings of the 24<sup>th</sup> ACM International Conference on Multimedia*, 531-535. https://dl.acm.org/doi/10.1145/2964284.2967278
- [10] Bateson, G. (1972). *Steps to an Ecology of Mind*. Ballantine Books: New York.
- [11] Butterworth, S. E., Giuliano, T. A., White, J., Cantu, L., and Fraser, K. C. (2019). Sender gender influences emoji interpretation in text messages. *Frontiers in Psychology* 5 (10), 784. doi: 10.3389/fpsyg.2019.00784
- [12] Chairunnisa, S., and Benedictus, A. (2017). Analysis of emoji and emoticon usage in interpersonal communication of Blackberry messenger and WhatsApp application users. *International Journal of Social Sciences Management*. (4), 120-126. doi:10.3126/ijssm.v4i2.17173



- [13] Collister, L. (2015). Emoticons and symbols aren't ruining language – they're revolutionizing it. *The conversation*. Retrieved June 29, 2022, from: <https://theconversation.com/emoticons-and-symbols-arent-ruining-language-theyre-revolutionizing-it-38408>
- [14] Cramer, H., Juan, P. D., and Tetreault, J. (2016). Sender-intended functions of emojis in US messaging, in *International Conference on Human-Computer Interaction With Mobile Devices & Services*. doi: 10.1145/2935334.2935370
- [15] Danesi, M. (2016). *The semiotics of emoji: The rise of visual language in the age of the Internet*. London: Bloomsbury Publishing.
- [16] Darics, E. (2013). Non-verbal signaling in Digital discourse: the case of letter repetition. *Discourse, Context, and Media* 2 (3), 141-148.
- [17] Dresner, E., and Herring, S. (2010). Functions of the nonverbal in CMC: Emoticons and illocutionary force. *Communication Theory*, 20 (3), 249-268. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1468-2885.2010.01362.x>
- [18] Evans, V. (2017). *The emoji code: The linguistics behind smiley faces and scaredy cats*. Picador USA.
- [19] Fane, J. (2017). Using emoji as a tool to support child wellbeing from a strengths-based approach. *Learning Communities. International Journal of Learning in Social Contexts*. (21), 96–107. doi: 10.18793/lcj2017.21.08
- [20] Gawne, L., and McCulloch, G. (2019). Emoji as digital gestures. *Language@Internet*. 17 (2).
- [21] Georgakopoulou, A. (2011). On for Drinkies?': Email Cues of Participant Alignments. *Language@Internet* 8 (4). <https://www.languageatinternet.org/articles/2011/Georgakopoulou>
- [22] Gumperz, J. (1982). *Discourse Strategies*. Cambridge University Press: Cambridge.
- [23] Hakami, S. Hendley and Smith, P. (2021). Arabic Emoji Sentiment Lexicon (Arab-ESL): A Comparison between Arabic and European Emoji Sentiment Lexicons, *Proceedings of the Sixth Arabic Natural Language Processing Workshop, EAACL WANLP*: 60-71. <https://aclanthology.org/2021.wanlp-1.7.pdf>
- [24] Herring, S. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In Sasha, B., Kling, R. & J. Gray (Eds.), *Designing for virtual communities in the service of learning*. New York: Cambridge University Press. 338 - 376. Retrieved July 2022: <http://ella.slis.indiana.edu/~herring/cmda.pdf>
- [25] Kaye, L. K., Wall, H. J., and Malone, S. A. (2016). Turn that frown upside-down: a contextual account of emoticon usage on different virtual platforms. *Computer Human Behaviour* (60), 463–467. doi 10.1016/j.chb.2016.02.088
- [26] Kazmi, A., Arooj, R., Anjum, U., and Khan, M. (2019). A Picture is Worth a Thousand Words, and so is an Emojis' Emojisification of Language: A Pragmatic Analysis of Facebook Discourse. *PLLS 2019 Proceedings*.
- [27] Kelly, R., and Watts, L. (2015). Characterizing the inventive appropriation of emoji as relationally meaningful in mediated close personal relationships, Paper Presented at the *Experiences of Technology Appropriation: Unanticipated Users, Usage, Circumstances, and Design*, Oslo, Norway.
- [28] Koch, T., Romero, P. and Stachi, C. (2022). Age and Gender in Language, Emoji, and Emoticon Usage in Instant Messages. *Computers in Human Behaviour* (126), 1-12.
- [29] Ljubešić, N., and Fišer, D. (2016). A global analysis of emoji usage. Paper Presented at the *Proceedings of the 10th Web as Corpus Workshop*. doi: 10.18653/v1/W16-2610
- [30] Na'aman, N., Provenza, H., and Montoya, O. (2017). Varying linguistic purposes of emoji in (Twitter) context, Paper Presented at the *ACL 2017, Student Research Workshop*. doi: 10.18653/v1/P17-3022
- [31] Novak, P., Smailović, J., Sluban, B. Mozetič, I. (2015). Sentiments of emojis". *PLoS ONE* 10: (12). e0144296.
- [32] Riordan, M. A. (2017). The communicative role of non-face emojis: Affect and disambiguation. *Computers in Human Behaviour*, (76): 75–86.
- [33] Rodrigues, D., Prada, M., Rui, G., Garrido, M.V., and Lopes, D. (2017). Lisbon emoji and emoticon database (LEED): norms for emoji and emoticons in seven evaluative dimensions. *Behaviour Research Methods* (50), 1-14. <https://link.springer.com/article/10.3758/s13428-017-0878-6>
- [34] Sadiq, M., Shahida, and IEEE. (2019). Learning Pakistani culture through the namaz emoji, Paper Presented at the *2019 2nd International Conference on Computing, Mathematics and Engineering Technologies*. doi: 10.1109/ICOMET.2019.8673479
- [35] Sampietro, A. (2020). Use and interpretation of emoji in electronic-mediated communication: A survey. *Visual Communication Quarterly*, 27(1), 27–42. doi: 10.1080/15551393.2019.1707086
- [36] Skovholt, K., Grønning, A., and Kankaanranta, A. (2014). The communicative functions of emoticons in workplace emails. *Journal of Computer-Mediated Communication*, 19(4), 780-797. doi: 10.1111/jcc4.12063
- [37] Tannen, D., (2007). *Talking Voices: Repetition, Dialogue, and Imagery in Conversational Discourse*. Cambridge University Press, Cambridge.
- [38] Trudgill, P. (2000). *Sociolinguistics: An introduction to language and society* (4th ed.). London: Penguin.
- [39] Vandergriff, I. (2013). Emotive communication online: a contextual analysis of computer-mediated communication (CMC) cues. *Journal of Pragmatics* (51), 1-12.
- [40] Zhou, R., Hentschel, J., and Kumar, N. (2017). Goodbye, text, hello emoji: mobile communication on WeChat in China, Paper Presented at the *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 748-759. CHI '17, Association for Computing Machinery, New York, NY, USA. doi: 10.1145/3025453.3025800