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# The Relationship between the Use of Emoticons and Virtual Engagement on Facebook among the Expatriates in the UAE

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**Abstract:** This study explores the practice of utilizing emoticons on Facebook and the different levels of virtual engagement according to gender among the expatriates in United Arab Emirates. The primary responses from 236 expatriates were collected using survey questionnaire. The data collected included demographic variables that constitute gender, age and nationality, frequency, social engagement level and motives of use of emoticons. The variables were analyzed using frequencies, correlations and t- tests. The results of the analysis show that both males and females used emoticons on Facebook; however, emoticons were used more frequently in personal communication than on official chats. It was further found that the main motives for the utilization of emoticons were to express emotions and to enhance the meaning of chat.

**Keywords:** Virtual Social Engagement, Facebook, motives of emoticons, Frequency of use of emoticons

## 1 Introduction

The rapid pace of technological advancements and computing applications has affected the lives of people and highly influenced computer-mediated communications. These communications, advanced by social media, has enhanced the power of communication, strengthened emotions and built quality relationship between social communicators [1], [2]. However, communication is not impactful without the use of non-verbal cues, like facial expressions, gestures and intonations forms [3]. To fill this gap, new non-verbal cues in computer mediated communication have been created [4], such different expressions are designed for expressing the feeling of happiness, sadness, excitement etc. The use of the non-verbal cues is predominantly suited to be used in social media platforms like Facebook. Popularly known as emojis [5], these emoticons have accelerated the meaning and value of social media communication [6]. Emoticons are described as the unique semantic and emotional features, which help clear intentions and mitigate ambiguity in computer mediated conversations [7]. The emoticons are viewed to provide the same function as non-verbal gestures in a physical communication environment [8].

To better facilitate the understanding of the use of emoticons, it is crucial to investigate how are emoticons used in computer-mediated communications, how they differ according to gender, and how individual demographic factors facilitate online virtual interactions and engagement. The literature on computer- mediated

communications indicates that in mobile based communication, that emoticons are more prominent used by women in comparison with men [9]. However, according to Huffaker and Calvert, there has been contrasting results provided which conclude that in personal web blogging by teenagers, men use more emoticons than women [10]. A limited number of studies were undertaken in the Middle East that have examined the use of emoticons in accordance with the demographic profile used in this research.

In addition, scholars have also examined the use of emoticons and their influence on social media and user engagement. For instance, the study by Lin and Utz shows that users browsing through Facebook exhibit the emotional response, both positive and negative responses [11]. Also, Mauri et al. evaluated the responses and emotions of the users in interacting with Facebook friends [12]. Although, there is a dearth of literature on the role played by the use of emoticons in social media on the virtual engagement of users; yet few studies were conducted in the Arab region.

Thus, the literature gap indicates that there is a need to examine the relationship between the use of emoticons on one of the most popular social media platforms, Facebook and the differences in virtual engagement levels according to gender among the expatriates in United Arab Emirates.

Emoticons naturally evolved from the punctuation marks on computer keyboards to express emotions [13]. They were first utilized as a paralinguistic element, which were commonly inserted by users at the end of sentence [14]. The first emojis to be used were created by Shigetaka

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Kurita in 1999 to represent facial expression, abstract concepts, and feelings. In fact, the picture of animals, plants, body parts and other objects were also used to express feelings [15]. Since then, emojis have been widely used in instant messaging, e-mails, social media platforms, instant messaging and other forms of computer-mediated conversations [16].

Emoticons, act as non-verbal cues in physical communication and are perceived to be important to mitigate the ambiguity in virtual communications [7]. According to Esposito et al. emoticons are important in the contexts of expressing one's emotions while interacting with others [17], while Dunlap et al. found that communication improved through the use of emoticons [18]. Apart from strengthening the communication in computer-mediated conversation, emoticons are also used to express emotions, and attract the attention of the other person and promote interaction and community identity [19]. They not only provide neutral responses as in physical face-to-face conversations, but they also fashion the message in more attractive manner for the recipients [20]. Additionally, emoticons provide the users with tools similar to tone adjustment and communication management in reality which helps to strengthen the interpersonal relationships among the users [21], [22]. Emoticons are used for expressing and enhancing emotions in computer-mediated-communication [23]. It is further found that emojis are mostly used in positive messaging, and less for sad and angry expressions [24]. Thus, emoticons, also known as emojis, enhance the social interaction and engagement among the users, owing to their abilities to heighten expressions.

The use of emoticons was also studied in the context of different cultures. Previous studies showed that the use of emoticons is influenced by the difference in male and female perceptions and different cultural backgrounds [25], [26]. In this context, emoticons emerge as a visual language, which can facilitate expression and emotion sharing among people with different languages, and even allowing for the non-English speakers to use the English social media platforms with ease such as Instagram, Facebook and Twitter [27]. The virtual engagement among users of emoticons is also enhanced since emoticons convey clearer semantic meanings in communication [28]. This allows for a better understanding of the overall meaning in the conveyed messages. With the potential to form an independent language, emoticons possess semantic and visual rhetoric functions that convey messages efficiently [29].

Demographic profile also plays a pivotal role in the use of emoticons in computer-mediated communications. The meaning and understanding of emojis tend to be similar among males and females; however, Herring and Dainas claimed that females tend to use the emoticons more frequently and in a more positive fashion than males [30].

However, Tossell et al asserts that males use different kinds of emojis while communicating in virtual space [9]. Chen et al further recognizes that the use of emojis is also based on context. Women tend to use more emojis in public communication, while in private communication, they use emojis less often [31]. Another study purports that males use the same emojis over and over with the aim to strengthen emotional expression. In fact, the interpretation of emojis differs on the basis of whether they are sent by males or females. Butterworth et al claimed that women tend to send more affectionate messages while men prefer to send more friendly than affectionate messages [32].

The motivation behind the use of emojis has also been found in the existing literature. The three main motivations behind the use of emojis by all the users is simplification, convenience and conduciveness [6]. Kaye, Wall and Malone entail that emoticon are used for relaxing the users' moods. [33] While other scholars stated that emoticons are used to build identity and to promote healthy interactions [34] and [35]. To sum up, virtual interactions are enhanced by the use of emoticons on social media platforms since they help to establish the emotional tone of the user, reduce discourse ambiguity and enhance the appropriateness of context [36]. Furthermore, emoticons are also used for greetings and maintaining social relations on virtual interaction sessions [37].

Hence, the current literature signifies that emoticon are often used by different users for different purposes, and motivations. Both genders, male and female, also tend to exhibit different behaviors, frequency of use and emotions in different contexts. Moreover, most of the studies point to the fact that emoticon enhance the engagement of users in virtual mediated environment and on social media platforms.

## 2 Methodologies

### Data collection

The study utilized the quantitative research methodology, and the data was collected using a survey questionnaire that was distributed via e-mail and social accounts to expatriates living in the UAE.

The total population for the study includes the total number of expatriates in the UAE in 2021, which is estimated at 9.991 million [38]. Using the confidence interval of 95%, the sample size found was 273 expats.

The snowball sampling technique was used to reach expatriates who have lived in the UAE for more than 4 years, and actively used emojis/ emoticons on Facebook. Participants were instructed to fill the web survey about the use of emoticons/emojis and their levels of social engagement on Facebook.

All the responses collected were then coded in Microsoft Excel, and missing value analysis was conducted such that any unfilled or partial filled questionnaire were discarded to avoid any biases in analyses. It was found that a total of

273 responses were initially sought, out of which 22 were not complete, and 15 were filled by the citizens of UAE and thus, were discarded. Finally, 236 fully filled responses were considered for further analysis.

**Table 1:** Sample characteristics (Gender and Age)

Variable	Frequency	Percentage
<b>Gender</b>		
Females	123	52.1%
Males	113	47.9%
<b>Age</b>		
Less than 18 years	17	7.2%
18 to 25 years	71	30.1%
26 to 35 years	67	28.4%
36 to 50 years	72	30.5%
More than 50 years	9	3.8%
<b>Total</b>	<b>236</b>	<b>100%</b>

**Measurement of Variables**

The survey was divided into two parts, the first section aimed to find information about the demographic variables. In the second section of the survey, participants were asked to answer a set of questions about the frequency of use of emojis/emoticons on Facebook, social engagement, their experience and motives for using emojis.

The frequency of use of emojis was tested using four- point scale (always, rarely, sometimes and never). The social engagement level was sought by asking the frequency of use of emojis while interacting with family and friends (always, rarely, sometimes, never) and during official or formal chats (always, rarely, sometimes, never). User experience with the use of emojis on Facebook chats was gauged by asking "Do you agree that using emojis on Facebook enhance your chat experience?" and the options given were yes, no and can't say. Finally, respondents were asked to identify their motivation for using emojis/emoticons in Facebook chat.

**3 Results & Discussion**

Only fully filled responses were retained for the purpose of the analysis. The frequency of the overall responses for all the questions, namely frequency of use of emoticons, social engagement level with the use of emoticons and user experience factors is presented in the following tables.

**Table 2:** The frequency of using emojis/emoticons in Facebook chat

Variable	Frequency	Percentage
<b>The use emojis/emoticons in Facebook chat</b>		
Always	134	56.8%
Sometimes	90	38.1%
Rarely	10	4.2%

Never	2	0.8%
<b>Total</b>	<b>236</b>	<b>100%</b>

The majority of the respondents always use emojis/emoticons in their chats, represented by 56.8%, while they use of emojis/ emoticons sometimes (38.1%), and only 0.8% never use emojis/ emoticons. We can infer those emoticons are widely used among the expatriates while chatting on Facebook.

**Table 3:** The use emojis/emoticons in chatting with friends and family on Facebook

Variable	Frequency	Percentage
<b>The use emojis/emoticons in chatting with friends and family on Facebook</b>		
Always	101	42.8%
Sometimes	96	40.7%
Rarely	39	16.5%
<b>Total</b>	<b>236</b>	<b>100%</b>

Results show that 42.8% and 40.7% of the respondents, respectively ‘always’ and ‘sometimes’ use emojis/emoticons while chatting with friends and families on Facebook, while only 16.5% ‘rarely’ use emojis/emoticons while chatting with their friends and families.

**Table 4:** The use emojis/emoticons in official chat on Facebook

Variable	Frequency	Percentage
<b>The use emojis/emoticons in official chat on Facebook</b>		
Always	58	24.6%
Sometimes	158	66.9%
Never	20	8.5%
<b>Total</b>	<b>236</b>	<b>100%</b>

The table shows that only 24.6% of the participants always use emojis/emoticons in official chat on Facebook compared to 66.9% who sometimes use emojis/emoticons while chatting with friends and family on Facebook. This indicates that expatriates prefer using emoticons more in personal context with their close contacts than in formal one.

**Table 5:** The use of emojis/emoticons to enhance user experience in Facebook chat

Variable	Frequency	Percentage
<b>The use of emojis/emoticons in Facebook to enhance user experience in Facebook chat</b>		
Yes	136	57.6%
No	89	37.7%
Can't say	11	4.7%

<b>Total</b>	236	100%
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The findings show that 57.6% of the participants believe that emoticons enhance their chat experience, while 37.7% feel the opposite. This finding is supported by a study which claims that the use of emoticons enhances the chat experience by spreading positive mood vibes [39], however the results contradict with other studies [40], [41] which mentioned that the use of emojis/emoticons leads to ambiguity in communication.

**Table 6:** The motivation for using of emojis/emoticons in Facebook chat

Variable	Frequency	Percentage
<b>The motivation for using emojis/emoticons in Facebook chat</b>		
Expressing feelings or emotion	218	92.4%
Reinforcing the message	217	91.9%
Making chat humorous	196	83%
Saving time in typing	161	68.2%
<b>Total answers</b>	236	

Most expatriates (92.4%, 91.9%, respectively) use emojis to express their feelings or emotions to other people on Facebook, and to enhance the content meaning in Facebook chats, while 83% use emojis to make chat funnier, finally 68.2% use emojis to replace some words in chatting with other people for the purpose of saving time. The results are in agreements with several studies that asserted that people use emojis to express oneself and relaxing mood [31]; promote interaction [35]; enhance content meaning by altering tone, content appropriateness, reducing discourse ambiguity and intensifying speech [33], [36].

#### **The relationship between frequency of use of emojis, social engagement levels and role of emojis to enhance chat experience by expats in UAE**

The correlation between the findings for frequency of use of emojis with social engagement (both using personal and official chats), and motives of emojis are also found. Strong positive correlation between frequency of use of emoji and the social engagement level in chat with friends and family is found at  $r = .655$ ,  $p < .001$ . Positive, but comparatively weaker correlation between frequency of use of emoji and use of emoji during official chat at  $r = .572$ ,  $p < .001$  is found. Similar findings for correlation between frequency of use of emojis with the motives of emoticons (to enhance chat experience) is also strongly positive at  $r = .635$ ,  $p < 0.001$ . The correlation for motives and social engagement levels, positive association was found for social engagement for chats with friends and families at  $r = .532$ ,  $p < 0.001$ ; and at  $r = .545$ ,  $p < 0.001$  for social engagement for official chats.

#### **Gender differences in using emoticons among male and female expats in UAE**

To assess the impact of difference in respondents' gender on the level of social engagement, motives and frequency of use of emoticons, t test was used. The results for t- test for frequency of use of emojis in Facebook chat show the there is a significant difference in the frequency of use of emoji for males and females, as given by Levene's test findings at ( $t\ 230.384 = 0.748$ ),  $p < 0.05$ . On an average, the females use emojis more often than males during Facebook chats.

However, the Levene's test results show that the social engagement level with use of emojis by males and females are same in case of both the informal (friends and family) [ $t\ (233.89) = 1.319$ ,  $p = .735$ ] and official chats [ $t\ (231.008) = .67$ ,  $p = .869$ ] at Facebook. Thus, the findings show that both males and females use emojis more often in personal chats than official chats.

Finally, the test results show that there is no difference between the perception of enhanced chat experience with the use of emojis between males and females,  $t\ (232.69) = -.411$ ,  $p = .937$ . Also, both genders perceive the saving typing time by use of emojis similarly,  $t\ (233.85) = -1.011$ ,  $p = .117$ . On similar lines, there is no difference for the motives of the use of emoticons for enhancing the meaning of chat between males and females,  $t\ (230.46) = .197$ ,  $p = .693$ . However, the motive of expressing feelings or emotions by emoticons is rated higher by males than females,  $t\ (222.84) = -1.50$ ,  $p < 0.05$ ; and also, males use emoticons for making chat humorous as compared to females,  $t\ (226.34) = -2.32$ ,  $p < 0.01$ .

The gender diversity in the use of emojis are discussed in many studies [30]; [42]; [9]. The study by Prada et al. provides the finding that supports the survey results, stating that females use emojis more often than males [42]. However, Tossell et al. provided contrasting result, claiming that males use more variety of emojis. [9]

## **4 Conclusions**

The study results show that the use of emoticons on Facebook chat is popular among the expatriates in the UAE. However, there exist gender difference in the use of emoticons, and is found that females tend to use emoticons more often than males while chatting on Facebook. Furthermore, the respondents use emoticons in both the personal and official work-related chats, but are more often used in personal chats, like with friends and families than the official chats. Furthermore, it was found that there is a strong positive correlation between frequency of use of emoticons and social engagement level while chatting with friends and family. The correlation for official chats is rather weaker. It is further found that the use of emoticons enhances the chat experience for the users. This finding is



not influenced by gender, and both shows similar perceptions. Finally, though motives of using emoticons are many, respondents rated the most important reason for using the emoticons are to express their feelings or emotions, which is rated higher by males than females. The other crucial motive is to enhance the content meaning in the chat and is rated same by both the genders. Emoticons are also used by many to add humor to their chats, more so by females.

There is not much gender difference in the use of emojis, perception about enhanced user experience, and the social engagement levels in using emojis in personal and official chats. The findings also reveal the differences in the motives and frequency of use of emojis in Facebook chats, which provide meaningful analysis to understand the behavior of different gender while emojis in Facebook chats.

The research paper also entails some limitations and challenges. Although the study found the gender differences on frequency of emojis use, social engagement and motives of use, but it fails to extract the rationale for these differences. Moreover, there are many emojis used in daily chats, and there is a possibility that the users exhibit different motives, social engagement levels and frequency in use, which are not considered in this study. Finally, the differences in cultural ethnicity and country of origin is not assessed with different variables of study, since the expatriates in UAE originally belonged from different cultural settings, and may have different perceptions about use of emojis.

However, the research provided major contributions and insights to understand the attitudes and emotions for using emojis in Facebook chats.

### Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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