

## **“Who are you?” Personality as a regulator of emotional exchange in Tunisians’ Facebook instant messages**

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### **Abstract**

*Computer-mediated communication (CMC) has increased dramatically in the last decade and expanded our social relations from families, friends, and neighbors to an almost universe of people due to the proliferation of social network sites particularly Facebook. In its early days, CMC was seen as only adequate in task-oriented communication because it lacks nonverbal cues. Against its meteoric rise, CMC has offered its version of nonverbal cues namely emoticons that are mainly used to compensate for facial expression in face-to-face conversations. Many computer-mediated discourse researchers showed concern in studying emoticons but scant attention was paid to the study of its variability through incorporating roles and variables. The current research adopts a sociolinguistic approach to emoticon use. It investigates the correlation between emoticon variations as a dependent linguistic variable in Tunisians’ Facebook Instant messaging conversations and the personality of the sender as an independent social variable. The research findings show that “who you are?” may serve as an emotional regulator for emoticon use and suggest a list of personal traits of Tunisian Facebook IM users who are keener to the use of emoticons than others.*

**Keywords:** Variation, Emoticons, The Sender’s Personality, Facebook IM.

## **1.0 Introduction**

Communication has existed since man appeared on earth. He/she has shown an incessant interest in developing his communicative skills and tools to be able to communicate his/her attitudes, feelings, conditions, etc. Communication has developed at the same pace as human development from messages carved on stone pillars to synchronous computer-mediated communication through written or audio-video mediums where the sole aim is always to communicate. It plays a vital role in human life; man's relationships, career, attitudes, and emotions that are undoubtedly drowned in the abyss of failure without communication (Patrick, 1998, 1).

Communication can have different forms. It can take place through writing or it can take the form of signs (De Saussure, 1983, 9 as cited in Chambers, 1995, 10). Signs can be classified into symbols, icons, and indexes (Pierce, 1958 as cited in Chambers, 1995, 10). Nonverbal language is a sign language that is acquired from birth and it is thought to be unconscious, unintended (Bull, 2008, para, 1), and innate (Ekman, 1993, 386). Nonverbal communication is indispensable in human communication (*ibid*). It occupies almost 70% of human communication (Birdwhistell, 1970, as cited in Park and Harada, 2002, 2). It can play different roles such as modifying speech, replacing speech, controlling the conversation, conveying personality and status, eliciting mimicry, and expressing emotions (Segal et al., 2013). It could take place through facial expressions, posture, gestures, voice, clothing, etc. (*ibid*). Different from verbal language, nonverbal language, and particularly facial expressions, are universal (Darwin, 1872, as cited in Huang and Matsumoto, 2011). Facial expressions are very important in communication. "Though nothing is said verbally, there is much to be understood about the messages we send and receive through the use of facial expressions" (Ekman, 1993, 387).

The evolution of communication involves the desire to perform tasks quickly and effectively. This desire was realised with the invention of the telegraph, the telephone, and later on cell phones. "Electronic communication, which includes such inventions as radio, television, and the telephone has revolutionarily changed the way we communicate" (*ibid*, para. 6). One of the inventions that brought an unraveled change to man's history is the invention of the Internet in 1967. In the beginning, the Internet was used for military purposes and it was mainly used in task-oriented communication in relation to military orders and the exchange of information; hence the development of computer-mediated communication (henceforth CMC). The use of CMC has gained incomparable popularity as it supports the instantaneous exchange of information (*ibid*, para. 9).

CMC is a communication tool that enables individuals to exchange text messages, transfer files, and track real-life relationships as well as offer opportunities to construct virtual relations with people all over the world. Today, we can contact people in other parts of the world without having to make a journey on foot, on horseback, or by ship. All you have to do is turn on your computer or turn on your cell phone. Nowadays, a whole discipline is interested in such language variety which is computer-mediated discourse analysis (henceforth CMDA). Many CMDA studies agree on the fact that CMC is incoherent,

fragmented, agrammatical, interactionally disjoined but communicatively effective (Herring, 1999; Derkset al, 2007; Chbichib, 2015).

In its early days, CMC was seen as an effective tool in task-oriented communication. That's why it was excessively used in Computer-Assisted Language Learning (CALL) and in Computer-Supported Cooperative Work (CSCW) (Walther, 1996, 6). As regards socio-emotional conversations, CMC was seen as a hindrance to successful communication as it lacks nonverbal cues (*ibid*, 4). These views originated from the context in which CMC had emerged. Accordingly, CMC was seen as an emotionally-cold medium unable to communicate users' emotions; hence the development of the filtered-out approach that was supported with early CMC theories such as the Reduced Social Cues Theory (Kiesler, 1986), the Social Presence Theory (Short et al, 1976) and the Media Information Richness Theory (Daft and Lengel, 1984). All these theories emphasized the importance of nonverbal cues in any effective communication and stated that CMC resulted in a socio-emotional vacuum.

However, regarding the dramatic use of CMC and the increasing number of its users, CMC has become a way to convey task-oriented instrumental as well as socio-emotional information (Walther, 1996, 6). CMC cannot be purely impersonal (*ibid*) and the excessive use of CMC is a justification of its being an effective tool in human communication, hence the rejection of the filtered-out approach and the advance of current CMC theories such as the Social Identity Model of De-Individuation (SIDE), the Social Information Processing Theory (SIP) and the Miscommunication as a Chance Theory (MaCHT). These theories emphasised the interpersonal aspect of CMC and its usefulness in high-level social and emotional sharing such as the development of Internet dating and romantics, and the significant success of computer-mediated therapies (Derks et al, 2007). CMC has offered its version of nonverbal cues namely emoticons.

Emoticons were first introduced on September 19, 1982. They were created by Scott Elliot Fahlam, a professor of Computer Science at Carnegie Mellon University (Sukyadi et al., 2011, 39; Ruan, 2011, 91). He suggested, "the use of this emoticon :-) following funny and humorous posts on the message boards and the use of this emoticon :-( for everything else that was not meant to be funny and all serious remarks" (Sukyadi et al, 2011, 39-40). 'Emoticon' is a blend coming from 'emotion' and 'icon', which means that they are icons for conveying emotions in online interactions. They are a combination of punctuation marks (? / . / ; / !), numbers (5 / 3/ 2), characters (a/ b/ c), and keyboard symbols (@/ \*% / %) (Ruan, 2011, 91).

Many researchers emphasise the importance of social network sites, and accordingly the importance of CMC as a medium for social and linguistic development and a pouring force in the world of education, business, politics, services, etc. In addition, CMC promotes the expression of various cultural differences, interests, and needs. Moreover, much interest has arisen in electronic discourse in the linguistic field, and people's interest in CMC has increased. As pointed out by Herring (1999), there are still not enough empirical studies about CMC and there is further need for future examinations and public standardizations based on various data and realistic information. Many researchers show an interest in comparative studies between CMC and face-to-face communication and comparative studies between

different CMC media. However, little interest is showed in the study of its linguistic and stylistic characteristics and the cultural effects of these characteristics (Herring, 2004).

Like any other language, paralanguage happens to vary along with different factors. In fact, the study of language variation is central to the study of language use. It is impossible to study the language forms used in computer-mediated discourse without tackling the issue of language variability. Most of this variation is highly systematic (Labov, 1968as cited in Chambers, 1995, 10). It depends on several factors such as the user's demographics, his/her communicative purpose, the context of language use, and his/her relation with the interactants. Herring (1999) found that the study of CMC variation is socially-conditioned. "This variation reflects the influence on the linguistic choices of CMD users of social factors such as participant demographics and situational context" (Herring, 2001, 9). It varies according to some social factors such as age (Chbichib, 2015), gender, ethnicity, and many others, and the situational context in which it takes place. Accordingly, CMD can vary and depend on certain variables so that it creates some stratification along with these variables. This variation will be a social marker but its variation cannot exceed some stylistic norms such as netiquette (Chbichib, 2017). Herring (2001) maintains that the situational context will either minimize or maximize sociolinguistic variation. Xu et al. suggested that the study of emoticons variation in CMC depends on three factors which are task, technology, and people (*ibid*, 2). The latter refers to the sender's personality and the receiver's perceived personality (*ibid*, 2-3).

In this study, the focus will be on the variation of the expression of nonverbal cues using emoticons on Tunisians' Facebook conversations. Certain computer-mediated communication aspects, particularly the nature of synchronous CMC media will be investigated particularly concerning IM language in order to discover what Facebook IM is like in the Tunisian context in relation to the use of emoticons. The main focus of this research paper will be on the variation of the expression of nonverbal cues using emoticons on Tunisians' Facebook messages sent via Messenger by studying the role of the sender's personality as an independent social variable on the variation of emoticon use as a dependent linguistic variable used to communicate the sender's emotions.

## **2.0 Literature Review**

### **2.1 Emotional exchange using emoticons on CMC**

Mantovani (2001) asserted that the lack of nonverbal cues does not mean that CMC is completely devoid of socio-emotional cues. What differs is the degree of socio-emotional content since the highest organizational and task-oriented communication could not be fully impersonal (Mantovani, 2001, 238). CMC users succeed to develop a set of devices that reproduce the communicative features of face-to-face conversation (*ibid*, 238). These include emoticons, emotes, and more sophisticated CMC icons using 2D and 3D charts that represent the users as avatars that act in a video game. All these invented devices highlight the importance of nonverbal cues and the socio-emotional dimension of CMC.

Emoticons are used to convey "an emotion, an appearance, an action, an object, and even the tone of chatting" (Ruan, 2011, 91). Rojas et al. (2011, 2) maintained that a smiling emoticon

activates the same brain areas as a smile in face-to-face interaction. They could also express moods that have not particular facial expressions such as being tired or bored (*ibid*, 2). Nowadays, there are great numbers of emoticon lexicons that have appeared as a result of the excessive use of emoticons especially among particular groups of people such as students (Ruan, 2011, 93). Many social network sites and chat systems imbue their programs with a list of emoticons that will be available to the users as they want to use them. This is “an attempt to make this aspect of the Internet language easier to understand and thus to provide quick access to the status of a “member with full rights” in the chat room (Bolder and Norley, 2008, 45).

The role of verbal language prevailed in content constructions over any other cues particularly emoticons contributions (Walther and D'Addario, 2001, 342). This may be due to the view that emoticons are typographic elements that require little effort in comparison with verbal text “that is slightly more involving and effortful” (*ibid*, 342). Such a view suggests that as the Internet users are particular in crafting their messages, the use of any device different from linguistic communication is going to be considered as an intrusion (Garrison et al, 2011, 113). By relying on the speech/writing dichotomy, “scholarship has been quick to label anything other than familiar forms of print-linguistic text as an additive or ‘paralinguistic’, thereby limiting the understanding of emoticons while not fully accounting for all their potential uses in IM discourse” (*ibid*, 114).

In a few years, the use of CMC increased rapidly. The emoticon seems to have become a basis in CMC. Emoticons were assumed to be compensatory in function. They partially compensate for facial expressions in face-to-face communication. This partiality may indicate that face-to-face representation of facial expressions is adopted as an exact way to evaluate anything different such as emoticons (Garrison et al., 2011, 113). Garrison et al. (2011, 114) agreed that “part of the function of the emoticon is paralinguistic in nature, [but] the paralinguistic label for the emoticon fails to account for all its current instantiations”. They viewed that such a conceptualization is premature and fixed and it fails to account for all the emoticon uses in IM communication (*ibid*, 113). Though one use of the emoticon can be compensatory for facial expressions, the limitation of the emoticon “to one usage function is a quick dismissal of what appears to be a more integral feature of IM discourse” (*ibid*, 113). Some researchers such as Provine et al. (2007) (as cited in Garrison et al, 2011, 113) found themselves attuned to the range of possibilities beyond compensation that emoticons can offer within IM discourse.

Provine et al. (2007) focused on the emoticon as a punctuation mark of the IM discourse much as would a comma or a colon (Garrison et al., 2011, 115). They began to illustrate, through their discussion of non-standard emoticon usage, the complexity of the emoticon, and the potential to be more than a ‘crude stand-in’ for missing facial features (*ibid*). Therefore, they focused on the emoticon “as something more rhetorically motivated and increasingly semiotically charged” (*ibid*, 115). Through the analysis of naturally occurring IM conversations, Provine et al. found that the use of emoticons in their corpus is somehow ‘conventionalized’ (*ibid*, 120). Emoticons generally occur at the end of the utterance or as the entire utterance itself (*ibid*, 120). Such usage is seen as shared conventions across conversations and multiple interactants (*ibid*, 120). But they maintained that the conventional

usage of emoticons does not negate the occurrences of certain idiosyncrasies, hence the flexibility of these conventions (*ibid*, 121). Another major finding was that the placement of the emoticon alone, that is to say as an entire utterance, “highlights the rhetorical significance of emoticons that equals (if not exceeds) the rhetorical significance of a print-linguistic utterance” (*ibid*, 123).

Although Provine et al. (2007) succeeded to show instances where the emoticons were used to signal a pause or as a cue to invite a response, the use of emoticons as punctuation markers in a communicative medium that privileges brevity of expression, abbreviated linguistic forms such as acronyms, and speed of response, appears to counter these characteristics of IM discourse (Garrison et al., 2011, 122). Provine et al.’s study showed that “researchers begin to recognize emotions as important semiotic units within a discourse structure; researchers will approach emoticons not as compensatory to language but as contributory to the conversation itself” (Garrison et al, 2011, 123).

## **2.2 The sender’s personality and the variation of emotional exchange in CMC**

CMC is no longer impersonal communication that lacks nonverbal cues. It exceeds face-to-face interaction as it offers more opportunities to develop interpersonal relations (Walther, 1996, 4). After extensive research on CMC, Walther (1996) introduced the Hyper-personal Model. This is an interpersonal communication theory that suggests that computer-mediated communication (CMC) can become hyper-personal because it exceeds [face-to-face] interaction (*ibid*). Walther (1996) maintained that CMC research has gone through three phases. The first phase is impersonal CMC, in which CMC was thought to be only adequate for task-oriented interactions since it lacked nonverbal cues (*ibid*, 5). The second phase is interpersonal CMC, which was developed in the light of the increase of time spent online and the exchange of social information between the communicators (*ibid*). The third phase is hyper-personal communication, which is the result of “heightened levels of intimacy, solidarity, and liking via CMC” (*ibid*, 5). Hyper-personal communication is “a combination of media attributes, social phenomena, and social psychological processes” (*ibid*, 5).

Emoticons are used very often, especially in synchronous chat devices such as IM, blogs, list serves, etc. This means that people online feel the need to express their emotions, mood, and state of mind. But as with any other language, nonverbal language happens to vary along with different factors. In fact, the study of language variation is crucial to the study of language use (Chambers, 1995, 10). It is impossible to study the language forms in computer-mediated discourse without tackling the issue of language variability. Most of this variation is highly systematic (Labov, 1968, as cited in Chambers, 1995, 10). It depends on several factors such as the user’s demographics, his/her communicative purpose, the context of language use, and his/her relation with the interactants (Herring, 2004).

Walther (1996) cited four factors according to which the CMC communication process depends. These are the receiver, the sender, the characteristics of the channel, and the feedback processes (*ibid*, 5). Not very different from that, in her study, Kelly (2015) adopted a semiotic analysis to emoticons. She investigated the understanding of emoticons used in text messages sent via smartphones. She aimed to determine whether there is a universal

understanding of emoticons. The study revealed that for the interpreter of the message, it is important that the textual context is established for the interpreter to be able to understand what the emoticons used in the messages mean. The result also showed that emoticons do not have different meanings in themselves and that they can have different meanings depending on the situation and the mood or the person for whom the message is intended. Through an investigation on the previous reflections about the use of emoticons in CMC and its variation, different factors were studied. These can be classified into social factors, contextual factors, and technological factors. Previous scholarship agreed on the role of social factors in linguistic choices.

According to Walther “the sender” factor is important in the shaping of any computer communication process (*ibid*, 10). The sender is seen, here, not through his/her identity (sex, age, nationality, culture, etc), but his traits. According to the Social Identity Theory, CMC users are characterised by a variety of selves including the personal and social identities that play a crucial role in the creation of the CMC context and have a major influence on the senders’ behaviours and their receivers’ reactions (Riva, 2002, 584). Walther (1996, 10) argued that:

Message senders use the process of selective self-presentation, which refers to CMC users’ ability to manage their online image. Being able to self-censor and manipulate message is possible to do within a CMC context to a greater extent than in face-to-face interactions, so individuals have greater control over what cues are sent.

These cues, verbal or nonverbal, are important in socio-emotional content and in the message content (Walther and D’Addario, 2001, 326). There are many tentative researchers such as Pennebaker and King (1999), Hancock et al. (2006), and Gill et al. (2007) (as cited in Xu et al., 2007) who studied the relation between CMC linguistic variation and personality. But, there is little research about nonverbal cues and personal traits in CMC.

One major work is that of Xu, Yi, and Xu (2007). The study investigated the effect of the communication task, interpersonal perception, and relationship intimacy on the use of emoticons in IM. The authors hypothesised that the use of nonverbal cues in CMC “help(s) to form an impression of the sender’s disposition or attitude” (*ibid*, 2). They reviewed the literature about the relation between the sender’s personality and the use of emoticons. In this context, they cited Walther’s (1992) Social Information Processing Theory. It maintains that CMC users adapt their communicative cues in a way that adopts the communicative constraints exerted by the CMC medium and supports the interpersonal exchanges between users (Riva, 2002, 585). So, these communicative cues are the sole source not only of socio-emotional information but also of interpersonal knowledge and impressions of the interactants (Xu et al., 2007, 2).

Xu et al. (2007, 2) declared that “the ability to express emotions in text and self-presentation are very important for a social and friendly atmosphere”. As a result, emoticons enhance the Perceived Usefulness (PU) (Huang et al, 2008, 468) and the Information Richness (IR) (Xu et al., 2007, 2) of CMC. Xu et al. suggested that the study of emoticons variation in CMC

depends on three factors which are task, technology, and people (ibid, 2). The latter refers to the sender's personality and the receiver's perceived personality (ibid, 2-3). Regarding the sender's personality, Constantin et al (2002, as cited in Xu et al, 2007, 2) studied the chat room moderators, that is to say, the chat room users; they found that the use of emoticons in a chat room discussion gives an idea about its users, who are perceived as "dynamic", "valuable", "talkative", and "friendlier" than those who did not use emoticons. Much in the same vein, Ho and Vathanophas (2003, as cited in Xu et al, 2007, 2) examined the influence of personality on online discussions and found that the users' personality traits affected the process and outcome of the discussion. They defined personality "as a stable characteristic of a human being [that] is viewed as an important predictor and determinant of what people will produce under certain conditions, such as online discussions" (ibid, 5).

Many researchers presented different models to describe the personality dimensions and traits, but the most interesting one is advocated by Costa and McCare (1992, as cited in Xu et al, 2007, 5). It is a five-factor model that is based on five major personality traits which are extroversion, agreeableness, conscientiousness, neuroticism, and openness (ibid, 5). The following table summarises the model (ibid, 5):

**Table 1 Personality Dimensions and the Poles of Traits (Adapted from Costa and McCare, 1992)**

Personality Dimensions	High Level	Low Level
Extroversion	Outgoing, physical-stimulation-oriented	Withdrawn, physical-stimulation-averse
Agreeableness	Affable, friendly, conciliatory	Aggressive, dominant, disagreeable
Conscientiousness	Dutiful, playful, organized	Spontaneous, flexible, careless
Neuroticism	Emotionally reactive, prone to negative emotions	Emotionally stable, calm, imperturbable, optimistic
Openness	Inventive, curious, open to new ideas and change	Conservative, cautious

According to this model, human traits are organized along with personal scales, and the personality of a person is ranked between two poles such as affable-aggressive and inventive-conservative. As the personality traits would differ, the stylistic choices of people would also differ and emoticon usage is not an exception (Xu et al., 2007, 5). Xu et al. (2007) found that emoticon usage in IM communication depends on the sender's personality. Not very different from that, Zhang et al. (2010, 8) found that users who exchange many emoticons on their conversations are regarded as more social than those who reject its use. In this research study, the role of the sender's personality is studied to investigate the correlation between its variation and emoticon use in Tunisians' instant messages on Facebook.

### 3.0 Research Methodology

This study is a part of an extended study that took place in 2015 and the interest in the role of the sender's personality is just a subpart within a large study on the intervening factors (social, technological, and contextual) on nonverbal cues variation. Adopting Herring's categorization of discourse 2.0(Herring, 2011, 1), the IM system is a familiar aspect of Web 2.0 that is based on textual communication. Herring maintains that familiar aspects of Web

2.0 discourse do not differ from old CMC modes since “textual communication remains an important online activity, one that seems destined to continue for the foreseeable future” (Herring, 2004, 1). So, she views that the use of Computer-Mediated Discourse Analysis (CMDA) without reconfiguration and reshaping of its aspects and levels of analysis does not matter because of the familiarity between CMDA and familiar discourse 2.0 (Herring, 2011, 9). Adopting Herring’s categorization, the IM system of Facebook is a familiar aspect of Web 2.0 that is based on textual communication. In this research, the nonverbal aspect of CMD is going to be studied by focusing on its variation along with personality as a social variable on Facebook IM conversations. The sociolinguistic approach is going to be applied in this CMC context to study variation in the nonverbal CMC as a micro-level linguistic phenomenon.

The structured interview is the basic qualitative method of data collection for this research topic. The main purpose of the interview is to collect more relevant information about people’s experiences, behaviours, and views in their voicing (Woods, 2011, 24). This method is used to supplement and extend our knowledge about Tunisians’ experience with emoticons on Facebook IM. One of the best ways to achieve this is through the use of direct questions in one-to-one situations (*ibid*). Such a method permits the generalization of what is found about the population from which the interview sample came (*ibid*, 25). The interview is based on the use of open questions that allow the respondents to answer without presented or implied responses. The role of the interviewer is just to “probe effectively” (*ibid*), that is, to stimulate the informants to produce more relevant information but without infusing themselves in the data produced (*ibid*, 26).

The whole interview included twelve questions with an estimated duration of fifteen minutes. Based on Patton’s six types of questions (2002), the original version of the interview included some background or demographic questions such as the informants’ age, gender, and occupation. The other questions raised inquiries about behaviour or experience, feelings, and opinions, and beliefs. The population sample was not previously fixed but the sample size was subject to time constraints and people’s eagerness to participate in this study. For the sake of brevity and effectiveness, a modified version of the interview will be presented in appendix A. In this study, only questions that have direct interest in the role of the sender’s personality and emotional exchange will be treated. Fifty participants were accepted to answer the interview, ten participants from each age group, with an equal average in terms of gender. Concerning their professional background, 40% of the samples are pupils and students, 46 % are workers in different fields, and 14% are unemployed.

#### **4.0 Data Analysis and Discussion**

##### ***4.1 Emotional exchange through emoticons on Tunisians’ Facebook IM***

The first purpose of this study was to get some general information on the Facebook IM users’ experiences with Facebook. The research findings indicated that most Tunisians have home Internet access, which enables the profound integration of social network sites in Tunisians’ everyday life. Regardless of Tunisians’ occupation, Facebook has become part and parcel of their daily activities. Its use varies from searching for news, looking for friends to posting comments, playing games, audio/ video downloading, and real-time chat. Facebook offers its users the opportunity to exchange instant real-time messages through a small

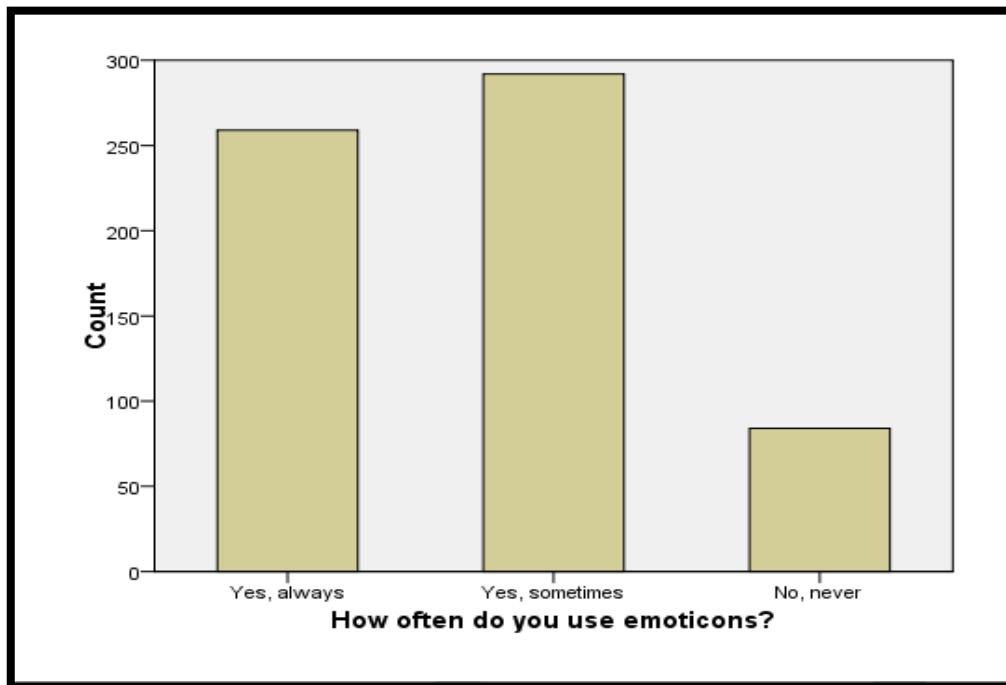
window that appears at the bottom of the profile page. It can take place simultaneously with other activities. A huge bulk of information ranging from written text to icons and stickers is exchanged in real-time chat; this can also be done using audio/video conferencing. Instant conversation combines both the permanent nature of written communication and the dynamism of spoken communication (Romiszowski & Mason, 1996, 398). Like in face-to-face conversations, in instant conversations, the Facebookers exchange verbal, non-verbal, and para-verbal information.

In order to understand the preferences of Tunisian Facebookers in expressing the nonverbal information, the participants were asked about the way they manage to express their emotions while using Facebook IM. The obtained results are presented in the following table.

**Table 2 Ways of Expressing Nonverbal Cues on Facebook IM**

	Frequency	Percent	Valid Percent
I use text	12	24	24
I use emoticons	7	14	14
I use text and emoticons	31	62	62
Total	50	100	100

Tunisian Facebookers have a propensity to use a mixture of text and emoticons to communicate their emotions. Emoticons are typical characters of computer-mediated communication discourse which compensate for the non-verbal information in face-to-face communication. As the use of emoticons is the main interest in this study, the participants were asked how often they used emoticons in their instant conversations. The following graph summarizes the obtained results.

**Figure 1: The Frequency of Emoticon Use**

It is clear from the graph above that most participants (86.8%) use emoticons usually or sometimes while 13.2% never use emoticons. The participants stated different reasons for using emoticons. The data analysis revealed that 49% use emoticons to clarify their emotions, 53.5% use emoticons to strengthen the emotional meaning expressed in the written text, 37.8% use emoticons to soften the tone of the written text, while only 0.6% added another reason for their use of emoticons. These reasons range from ‘avoiding the use of written language for the sake of brevity and speed of response to making fun and imitating their interactants’ use of emoticons. It seems that there is a certain consensus that human emotions could be adequately communicated using emoticons on Facebook IM. But a considerable proportion (approximately 20%) disagrees that human emotions could be communicated using emoticons.

Facebook offers a wide range of activities, and real-time chat is one of them. The instant messaging variety is agrammatical, with relaxed punctuation and capitalisation rules, and written in mixed pidgin forms (Herring, 1999; Tippmann, 2002). One of the typical features of chat language is the use of emoticons. It was found that this emergent form is popularly used by Tunisian Facebookers. The reasons for using emoticons are, in 53.5% of the cases, to strengthen the emotional meaning expressed in the written text, in 49% to clarify the participants’ emotions, and in 37.8% to soften the tone of the written text. Only 0.6% of the participants added other reasons for emoticon use. These reasons include avoiding the use of written language for the sake of speed and brevity, making fun, and imitating others. According to these figures, emoticons are used deliberately and to improve the understanding of the message, not as a quicker way of typing.

These research findings corroborate in different ways with previous researches on emoticon use. Adopting Kress's (2005) sociolinguistic semiotics, emoticons are social codes that are needed for making meaning and making the sender's intended meaning understood rather than a social trend. Only 0.6% of the participants used emoticons for the reason of imitating others, as some of the participants' answers show. In this context, this means that Tunisian Facebookers try to make themselves understood by using emoticons. An emoticon is used simply as an extension of the text and/or to emphasise the sentiment behind the text. According to Kress (2005) emoticons are used mainly to provide more detail to the text and that is why there is a need for a combination of text and image (62% of the participants in this study tend to mix written text and emoticons).

The main reason for using emoticons is to emphasize the emotional meaning expressed in the written text (53.5% of the population sample). This corroborates with Segal et al. (2003) who found that nonverbal cues can play a significant role in "accenting" the emotional meaning expressed in the verbal message. Emoticons are also used to express human emotions. Emoticons can replace the verbal message and assume the burden of passing on the nonverbal information on their own. This preference highlights the socio-emotional-oriented aspect of CMC (Walther, 1996). CMC is no longer an impoverished cold medium according to the filtered-out approach. CMC has become an interpersonal medium that helps the development of socio-emotional relations such as friendships and romances (*ibid*).

#### **4.2 The sender's personality and emoticon variation on Facebook IM**

In this section, the focus will be on the impact of the sender's personality as a social variable and the variation of emoticons as a linguistic variable. The participants were asked whether they think that the personality of the sender might influence his/her emoticon use. 88.8% confirmed while the rest rejected the impact of the sender's personality on emoticon use. In order to study in depth such a theme and adopting Costa and McCrae's model (1992), the participants were presented with a table that contains five personality traits. These are Extroversion, Agreeableness, Conscientiousness, Neuroticism, and Openness. At each level, some traits are presented in dichotomies describing the low and high levels of that trait. The participants have to choose whom they expect to use emoticons more than the other. The participants' answers are illustrated in the following table.

**Table3 Personal Traits and Emoticon Variation**

Personal traits	High level	Valid Percent (%)	Low level	Valid Percent (%)
<b>Extroversion</b>	Sociable	97.5	Unsociable	2.5
<b>Agreeableness</b>	Affable Friendly Conciliatory	80.4 100 25.4	Aggressive Dominant Disagreeable	19.6 0 74.6
<b>Conscientiousness</b>	Dutiful Inflexible Organized	32 9.4 9.2	Spontaneous Flexible Careless	68 90.6 90.8
<b>Neuroticism</b>	Emotionally reactive Pessimistic	98.7 1.1	Emotionally stable Optimistic	1.3 98.9

Openness	Inventive and open	97.7	Conservative and cautious	2.3
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Adopting Costa and McCare's model (1992), personal traits are categorised into five types of traits. It was found that in terms of extroversion, sociable Tunisian Facebookers are inclined to the use of emoticons. In relation to agreeableness, the affable, friendly, and disagreeable Tunisian Facebookers tend to use more emoticons. Regarding, conscientiousness, they are the spontaneous, flexible, and careless Tunisian Facebookers who are apt to use more emoticons. In terms of neuroticism, the emotionally reactive and optimistic users prefer to include more nonverbal cues in their instant messaging. Finally, when it comes to openness, the inventive and open Facebookers are more expected to muddle their conversations with emoticons.

In an aim to strengthen our knowledge about the correlation between the sender's personality and emoticon variation and in order to give some freedom to the respondents if they felt that they had something to add in relation to personal traits, in the next step, the participants were asked how they evaluate a person using emoticons too much in comparison with another who does not use them at all. Some participants (64%) find this person-friendly, sociable, funny, emotionally reactive, and spontaneous. Some others (18%) find him/her unserious, playful, impolite, and careless while still some others (18%) find that using emoticons has nothing to do with the sender's traits or say that they cannot give any judgment. On the other hand, the person who rejects the use of emoticons is a pragmatic and serious person who tries to construct some limits in his/her conversations or just prefers to use other ways to express his emotions.

Actually, these findings substantiate previous researches stressing the importance of personality in socio-emotional content variation such as those of Pennebaker and King (1999), Hancock et al. (2006), Gill et al. (2007) (as cited in Xu et al., 2007), and Constantin et al. (2002, as cited in Xu et al., 2007, 2). For example, Constantin et al. (2002, as cited in Xu et al., 2007, 2) studied the chat room moderators and found that the use of emoticons in chat room discussion gives an idea about its users, who are perceived as "dynamic", "valuable", "talkative", and "friendlier" than those who do not use emoticons. This comes in agreement with our research findings, in terms of personality traits; it seems that Tunisian Facebookers who tend to use emoticons in their instant conversations have one or a mixture of some traits. They could be sociable, affable, friendly, disagreeable, spontaneous, flexible, careless, emotionally reactive, optimistic, inventive, and open.

Adopting the same line of thinking, Walther (1996) stated that the sender factor which is a socio-psychological process is indispensable in the determination of the type of socio-emotional CMC and its effect exceeds that of social identity (sex, age, nationality, culture, etc). Based on Walther's (1996) Social Information Processing Theory, conversations can be classified into four types where impersonal CMC holds the lowest level of socio-emotional content and hyper-personal CMC comes on the opposite side. In the light of the data analysis, it can be concluded that hyper-personal CMC is the character of the Facebook conversations of Tunisians having the previously mentioned personal traits. These conversations will be characterised by high Perceived Usefulness (PU) (Huang et al., 2008, 468) and Information Richness (IR) (Xu et al., 2007, 2) that are enhanced with the use of emoticons (Xu et al., 2007, 2). It is clear from these findings that the role of the sender's personality is crucial in determining the frequency of emoticon use in Tunisians' Facebook conversations. Different

from the participants in face-to-face interactions, it seems that CMC users have more control over their identity and the way they want to present themselves in online conversations (Riva, 2002, 584). Xu, Yi, and Xu (2007) sustain the idea that communicative cues in CMC are the sole source not only of socio-emotional information but also of interpersonal knowledge and impression formation (Xu et al, 2007, 2). This way, expressing nonverbal cues using emoticons helps construct an idea about the senders' traits. In this study, the use of emoticons helps construct an idea about the users but even its rejection helps the construction of some impressions about the interactants. The participants declared that the person who rejects the use of emoticons is a pragmatic and serious person who tries to construct some limits in his/her conversations or just prefers to use other ways to express his emotions. The participants' different evaluation of the sender's personal traits and their different reactions towards messages overloaded with emoticons highlights the effect of emoticons and personality in the CMC process.

## **5.0 Conclusion**

One of the remarkable features of technological evolution is the diffusion of computer-mediated communication that has faced different challenges since its early days because it is always subjected to comparisons with face-to-face communication as a perfect reference. Progressively, CMC has succeeded to surmount many problems by expanding its tools and affordances and attracting a vast platform of users with different socio-cultural backgrounds and professional interests. The dramatic use of CMC together with users' interest to develop their communicative input has led to the inception of emoticons. Emoticons are created as substitutes for facial expression in face-to-face communication. Since their inception, the use of emoticons in computer-mediated discourse has been subject to many debates.

This research study was set out to explore the stylistic behavior of emotional exchange through emoticons as indicators of nonverbal cues in Tunisians' instant messages on Facebook. The study also sought to identify the role of personality as an independent social variable that governs the use of these icons and how it intervenes to maximise or minimise emoticon use and accordingly emotional content on instant messages. The obtained results showed that this factor was momentous in determining the amount of emotional exchange in instant messages. For example, a Tunisian Facebooker having some personal traits such as being sociable, friendly, emotionally reactive, open, and flexible could use supplementary emoticons in his/her messages.

This research study has some empirical and practical implications. One major importance of this study is that it gives an idea about the virtual speech community in Tunisia and particularly Tunisian Facebookers. It highlights some stylistic choices of Tunisian e-discourse, in general, and of Facebook instant conversations, in particular. Concerning the expression of nonverbal cues using emoticons, research is scarce about the relation of nonverbal cues and personal traits in CMC. The obtained results help understand how people share emotions on Facebook IM and show that variability is an indispensable character in human communication. Prior research has suggested that people who use the Internet and especially Facebook tend to socially share their emotions and receive more social and emotional support from others (Hampton et al. (2011)) but have not detailed the factors

through which this phenomenon occurs. Our findings suggest that one such factor is that “who are you?” may serve as an emotional regulator for emoticon use. The results about how people differently share their emotional content through emoticons on Facebook IM contribute to the understanding of how people adapt their communicative behaviours including an emotional expression to their communicative context and its constraints.

One major practical implication of this study is that it might give guidance into designing affordances that improve the choices and outcomes around emotional sharing on Facebook IM. Regarding the importance of emotional expression in CMC, many technological companies are interested in the development of digital applications that help the automatic detection of emotions for desktop and mobile devices such as Emotient and Affectiva. One of the most popular applications is EmoVu developed by the Eyeris Center. The basic rationale behind this application was to “bridge the gap between emotion recognition, face recognition, age, and gender identification, eye tracking, gaze estimation and everything else in between” (EmoVu, 2015). In this context, Facebook. inc may opt for the integration of one of these applications to help the detection of emotional expression as a function of the users’ demographics and the communicative context, without the use of traditional ways of emotional expression styles including emoticons.

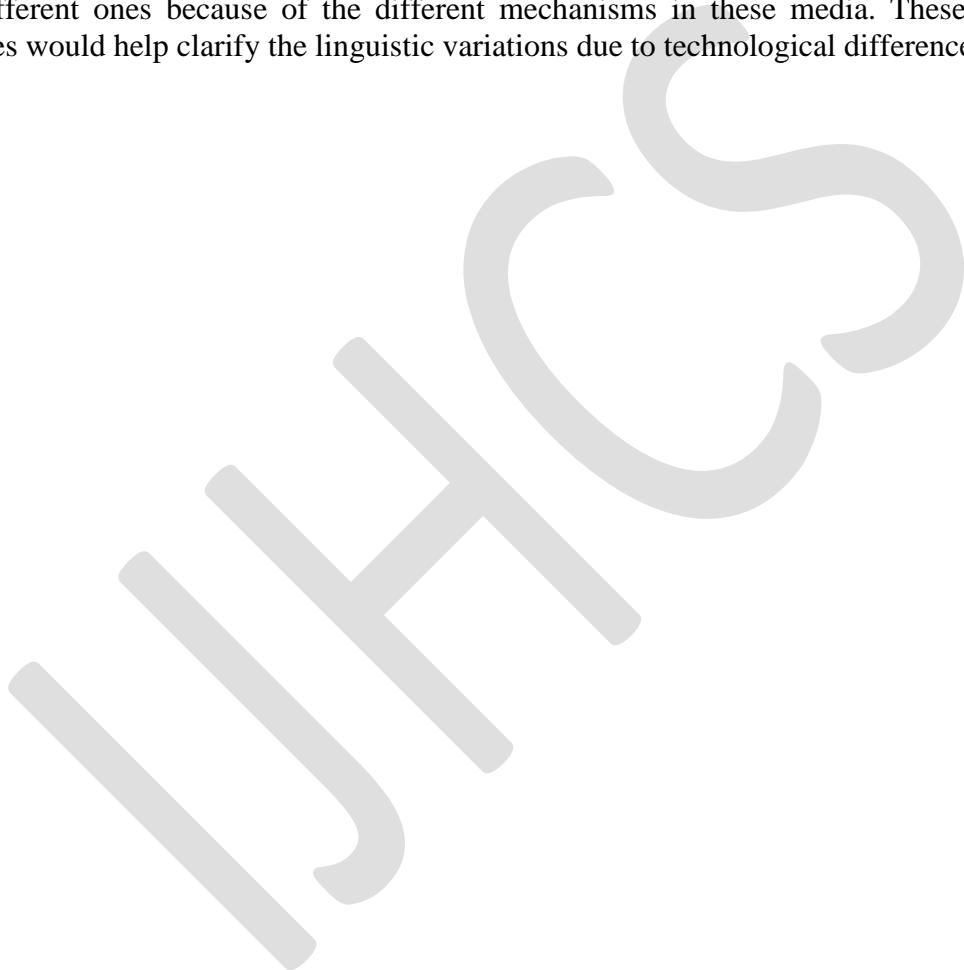
The study has offered an evaluative perspective on important online linguistic behaviour and it was conducted in a natural context through sampling Tunisian Facebookers. However, the importance of the obtained results does not negate the existence of some limitations and flaws in this study that might affect its findings. First of all, the number of participants in this study seems to be low in comparison with the target population (i.e. those who have Facebook accounts: 7,300,000 in 2019 (Digital Discovery.com)). Accordingly, further generalizations of this study will be limited. Furthermore, the relation between the sender’s personality and emoticon use is highly tied with the receiver’s perceived personality and its acceptance/rejection of the emoticon. Also, the selection of personal traits is based on a hypothetical situation rather than an experimental setting. This is a point of consideration in the generalisation of the results.

This study has just scratched the surface. There is a need for more research in order to further establish the interpretation and context within the use of emoticons. To ensure the effectiveness of future research, one obvious extension of this study is to increase the sample size, in a manner that will allow additional manipulations such as investigating the views of more people as well as assessing the impact of other intervening variables, such as the variable of age, gender, and experience using longitudinal studies that will permit the exploration of Facebook conversations of one person as he/she moves across time and see whether this will have remarkable influences in terms of stylistic choices.

Moreover, the study of the impact of personality behind the variation of nonverbal cues using emoticons is highly important but it is not clear whether this use is driven by a conscious deliberate choice or it is a spontaneous unconscious process. It is recommended to direct future research to new fields of studies such as psycho-linguistic, pragmatics, and semiotics. Another important research direction will be the use of cross-cultural studies. It is important to obtain culture-specific findings that can later be linked to findings from other cultures.

Comparative studies will allow the identification of cross-cultural differences that will help recognizing and understanding emoticons between different cross-cultural users to improve the intercultural social relationships between Internet users particularly as social network sites such as Facebook open the way for the construction of relations that would be impossible in real contexts.

Finally, almost all previous studies confirm that asynchronous CMC media such as e-mails are not as spontaneous as chats or instant messages. Senders of emails pay much attention to their language (Merchant, 2001). Further analysis might study the difference in emotional expression between different CMC media and whether users adopt the same stylistic choices or different ones because of the different mechanisms in these media. These comparative studies would help clarify the linguistic variations due to technological differences.



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## Appendix A

### Interview

**Introduction:** This interview will be used for academic purposes. Your views are highly valuable. Respondents' anonymity is guaranteed. Would you please sincerely answer the following questions?

Age: .....

Sex: Female  Male

Profession: .....

**1- How do you manage to express your emotions on Facebook IM?**

.....

**2- How often do you use emoticons on your Facebook IM messages?**

.....

**3- Why do you use emoticons on Facebook IM?**

.....

**4- How adequate is the use of emoticons as indicators of non-verbal cues?**

.....

**5- Do you think the personality of the sender might influence his/her use of emoticons?**

- Yes  
 No

**6- Who is more expected to use emoticons? (Adopted from Costa and McCrae, 1992)**

Personal traits	High level	Low level
<b>Extroversion</b>	<input type="checkbox"/> Sociable	<input type="checkbox"/> Unfriendly
<b>Agreeableness</b>	<input type="checkbox"/> Affable <input type="checkbox"/> Friendly <input type="checkbox"/> Conciliatory	<input type="checkbox"/> Aggressive <input type="checkbox"/> Dominant <input type="checkbox"/> Disagreeable
<b>Conscientiousness</b>	<input type="checkbox"/> Dutiful <input type="checkbox"/> Inflexible <input type="checkbox"/> Organized	<input type="checkbox"/> Spontaneous <input type="checkbox"/> Flexible <input type="checkbox"/> Careless
<b>Neuroticism</b>	<input type="checkbox"/> Emotionally reactive <input type="checkbox"/> Pessimistic	<input type="checkbox"/> Emotionally stable <input type="checkbox"/> Optimistic
<b>Openness</b>	<input type="checkbox"/> Inventive and open	<input type="checkbox"/> Conservative and cautious

**7- How would you evaluate a person using emoticons too much in comparison with another who do not use them at all?**

.....