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Exploring Emoji Use and Frequency Among Mongolian Users: Examples from Facebook and Twitter

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ABSTRACT

Internet linguistics has been rapidly improving since the advent of the Internet; humanity has come to value or emphasize a new form of communication, the Internet, or computer-mediated communication (CMC) around the world. Emoji is a graphical image, representing attitudes or concepts, and emotional feelings in a simple way. Emojis became popular around 2010 worldwide and can be used on any smartphone or computer in a message or conversation. Dresner & Herring stated that some social factors include the gender and the age of CMD users (2010). Emoji is one of people's emotional and facial expressions, and its use exceeds the standard norm of the language, especially on Facebook and Twitter, known as the most used platforms in Mongolian internet communication. We have studied one of the sociolinguistics studies, the emoji use on Facebook and Twitter in Mongolian computer-mediated discourse, also known as conversational discourse, comparing people's age, gender, emoji use, and frequency through the questionnaire we processed. The findings of the study show that people write online using excessive emojis, which means that emojis have become an integral part of people's everyday life. Following excessive use of emojis, there is a fear that may lead to language extinction, and the spelling rules may be compromised, which could adversely affect the official written language. We hope that this study will contribute to the scholarly literature on computer-mediated discourse in general, Mongolian computer-mediated discourse in particular, and the emoji use and its frequency, a recently introduced in our country and a little-studied feature of computer-mediated discourse.

INTRODUCTION

Through language, human beings are known as social animals because they express their ideas and desires to others throughout their lives, share them with others, and receive all information from society and pass it on to others. Therefore, language is the primary tool to connect people and culture. It is no secret that in recent years, as society has progressed, we have been spending more time using the Internet and social media to communicate and receive and disseminate or share information. In addition, people use various symbols, shapes, icons, and graphics to communicate with each other on the Internet, and many of them find it easier and more enjoyable to communicate. Therefore, the language of the Internet environment has been studied concerning socio-linguistics and psycho-linguistics (Nansalmaa, 2020).

New changes appear in people's relationships every day along with the development of society, and along with that, the language also evolves, so the research direction of linguists is also changing. An example of this is that in 2001, the English scholar David Crystal founded the theory of Internet Linguistics.

He coined the term "Netspeak" in Internet communication, which includes acronyms such as OMG-Oh My God, LOL-Laughing Out Loud, etc., used in instant messaging and chat, 😊😍😂😉😎🥲 is a form of communication with emotional signs, such as "a new type of communication" or a "third tool" that combines the characteristics of spoken and written language (David Crystal, 2001).

It can be seen that emoji is a symbol of facial expressions, movements, and moods on the Internet, so the concept of emoji is an emotional symbol that serves the primary purpose of Internet language to save time and increase productivity.

LITERATURE REVIEW

Before studying emoji, let's take a brief look at its origins from a selection of relevant sources. On September 19, 1982, computer scientist Scott Elliot Fahlman noticed that the computer messaging system used by Carnegie Mellon University professors lacked something important. He suggested two lines of three characters. The ":-)" line explains whether the message is a joke or something funny, and the ":-(" message means frustrated (Dresner, Herring, 2010). These "punctuation faces" have become very popular and expanded, with several variants such as ";-)", ":-P", ":". A few years later, in 1986, appeared in Japan the first "kaomoji", from Japanese kao (face) and moji (character), strings of characters very similar to emoticons, except that they were not to be read sideways: "^_^" or "T_T", for example (Markman & Oshima, 2007). Although emoticons remained very popular in Western CMC until the late 2000s, an alternative to kaomoji was introduced in Japan in 1997 by Shigetaka Kurita, a designer of Japanese mobile operator DoCoMo (Lebduska, 2014). To appeal to Japanese teenagers, Kurita invented the "emoji", from e ("picture") and moji ("character"), tiny colorful graphics available in 176 different shapes, representing human faces, animals

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and objects. Their success was immediate, and soon every mobile phone company in Japan integrated emoji into their system. Tuttle noted that when Apple's first iPhone was launched worldwide in 2007, Japanese users requested the ability to use emojis directly from their iPhone's keyboard (2016).

However, the new symbols had to be approved by the Unicode consortium to allow users with different types of mobile phones to write and chat with the same emoji. The Unicode Consortium is a small committee of people working for significant hardware companies worldwide who decide which characters will be added to the Unicode standard – the international "character list" implanted in every CMC device. However, in 2007, when a particular emoji was sent from an iPhone to a Samsung mobile phone, for example, it was very likely that the emoji would not be understood correctly by the receiving device, and the reader would see an amorphous grey square appear instead of the intended emoji. Therefore, in 2010, the Unicode Consortium considered that emojis were not just a passing trend, and 860 different emojis were added to the Unicode Standard (McCulloch, 2019). Following this "emoji revolution," computer-mediated communication users outside Japan quickly recognized the characters and put them into use. Since 2010, the Unicode consortium has been updating and adding new emojis. By the time of the last update in October 2020, there were 3,521 types of emoji, according to the website Emojipedia (https://emojipedia.org/stats/).

Researcher Steinmetz. K noted in his 2015 article that emojis have the essential characteristics of the digital world, that they can express emotions very quickly and visually, and that they have become the most widely used. I hope the study will be relatively innovative amid various modern socio-technical factors.

Dr. Enkhmaa. B (2015) briefly mentioned in her book "Internet Linguistics" that emoji is used in Mongolian internet discourse differently. The researcher Borolzoi (2019), in his doctoral dissertation on "Mongolian language norms and rules on the internet," referred to emojis as a form of emotional communication as a form of communication with expressive symbols, as cited by English scholar David Crystal's (2001) definition of emoji, including its linguistic function. No research has been done in our country yet. A study on emoji use has not been conducted in our country.

Research Aims

In our country, Internet linguistics, especially, the study of the phenomenon of excessive use of emojis in interpersonal communication in the online environment, is considered a timely research direction. It is believed that conducting research in this area will have a positive impact on the development of the language of the online environment and the culture of people's online communication, and will create an opportunity to determine one stage of language development. The study of emojis in online communication has been carried out on a large scale in many foreign countries, led by America, England, and France. But this is the first attempt to start research in this field in our country. Therefore, in this paper, we aim to study or examine emoji use on Facebook and Twitter in Mongolian Computer-Mediated Discourse, called Conversational Discourse, according to social factors such as age, gender, and frequency.

Research Methods

This study uses research methods such as data sampling, analysis, comparison, interpretation, and generalization, and studies emoji use in online (internet) communication or discourse, such as Facebook and Twitter, social networking sites (SNS). The names of the SNS users will be anonymized in the study. The following criteria were considered when compiling the research materials database, and sample messages from social networking sites (from now on referred to as SNS) were used as research materials.

There must be at least one emoji and discourse within the context or sentence. This is because context is essential to prove emoji use and its frequency. For this reason, some emoji materials were omitted as the following definitions:

• "Naked" emojis are used in a message on their own, in a standalone way. These emojis do not appear alongside text or other emojis, making it very difficult to interpret them correctly and separately. "Facebook Reaction" emoji: In 2016, in addition to the button "like ", five new reaction buttons such as "love ", "haha ", "wow or surprised ", "sad ", and "angry " were added for Facebook users.

• In April 2020, the "care " emoji as an additional reaction button for the anti-Coronavirus pandemic crisis was added by Facebook. Although these buttons take the shape of existing emojis, they can only be used by users to react to a post or comment and cannot be accompanied by text or other emojis (Larsson, 2017). The "care " emoji does not exist in the Unicode standard as an emoji and can only be used in reaction buttons on Facebook. Although these buttons take the shape of an emoji, they can only be used by users to respond or react to a post or comment and cannot be accompanied by a message or other emoji (Larsson, 2017). The best way for us to collect emojis was to find out emojis used alongside text in messages, posts and comments.

Data source: Most messaging applications (Facebook Messenger, Viber, etc.) are often used to write private conversations and messages, and it is tough to collect messaging discussions and text messages using emoji. Public computer-mediated discourse data can be found in many blog posts, forums, or social networking sites (SNS). However, media often use their own words and phrases, and most bloggers do not use emojis. Therefore, we chose to focus on the emoji used by SNS users as they share publically and collect data from them.

From the most popular SNSs in the world, we have decided to use Facebook and Twitter information, and the reasons

for this can be explained as follows. Facebook is the most popular and daily SNS in the world and Mongolia, with about 2.9 monthly active users worldwide in September 2021. Users can log in to Facebook to express themselves, comment on different topics, and gather information from public groups of people focused on specific issues or specific areas. Therefore, the data we analyze should be collected from the following online fields.

• Posts and comments are written on public Facebook pages and public Facebook groups, which any Facebook user can access.

• Posts and comments were written on private Facebook groups containing thousands of users. The address and name of the person who wrote the message or comment will be confidential.

On Twitter (also known as "Жиргээ (Jirgee)" in our country), people debate and discuss a wide variety of topics (for example, news, art, culture, and everyday life). All messages posted on Twitter are open to the public and can be used without the permission of the speaker or tweeter. The names of the users' tweets will be anonymized, too.

Discussion and Analysis

In this paper, we aimed to study or examine emoji use on Facebook and Twitter in Mongolian Computer-Mediated Discourse according to social factors such as age, gender, frequency, etc. According to our purpose, we have decided to make research questions related to the social factors influencing emoji use in Mongolian computer-mediated discourse, so let's look at the findings. CMD is the first and most recent addition to the Mongolian internet or applied linguistics. The findings of this study clearly show that people generally write online using abundant emojis not depending on gender and age, and they use emojis frequently, which means that they have become an integral part of their everyday life. Following excessive use of emojis, there is a fear that may lead to the fear that the mother language may become extinct and the spelling rules may be compromised, which could adversely affect the official written language. Therefore, government officials, the Ministry of Education, and language experts or linguists should pay attention to online literacy, writing, grammar even online behaviors; sometimes, these can be limited.

RESULTS AND FINDINGS

Sociolinguists have studied a great variety of aspects of CMD. Similar to the fact that, depending on several factors, people do not speak in the same way in face-to-face conversation, the same applies to written online conversation (Androutsopoulos, 2006). Aside from the technological factors that can influence the way people use language (such as the particular device or website on which the users are communicating), situational factors are also important: the topic of the conversation, its tone (e.g., severe or playful) and the relationship between the interlocutors are some of these contextual variables

that are important to take into account when analyzing CMD (Herring, 2007). Some of these social factors, in particular, which are related to the specific features and attributes of the users, have been proven to have an exciting impact on the production and the interpretation of emoji use. These factors include the gender and the age of CMD users (Dresner & Herring, 2010). Of the factors mentioned by the above scholars, we will only present in this section how emojis are related to age and gender and how frequently they are used in an observational study.

Emoji and Age

Figure 1 aims to show the age group of the respondents. In our study, we tried to include representatives of all ages involved in online communication, so we hope that our study will be more realistic. One thousand eight respondents between 14 and 57+ year-olds were involved in our survey. The figure below shows youths were involved more.
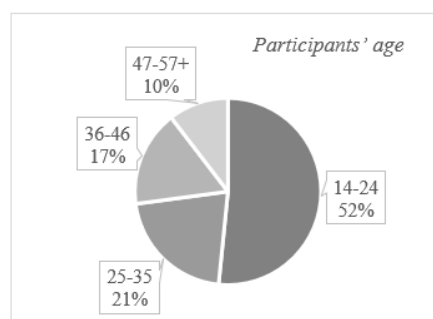

Figure 1: Participants' age /by percent/

Figure 2 was designed to determine whether age affects the use of emojis. We also hope that this will make the relationship between emoji and age clearer. We thought that people's age is essential to using emojis, which can be different depending on their age. Therefore, we asked the participants, "Do you think people's age affects the use of emojis?"
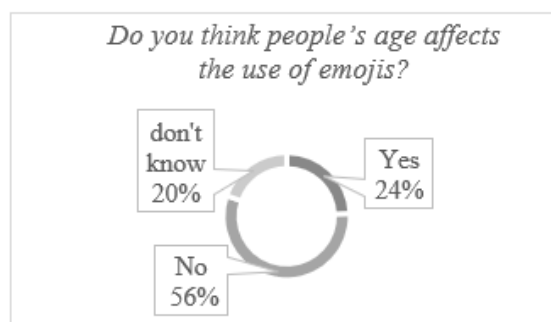

Figure 2: "Do you think people's age affects the use of emojis?

56% of the participants answered the question "No," 24% of whom "Yes," whereas 20% of them wrote, "Don't know." Therefore, most of the participants believe that age doesn't affect emoji use, but it would be clear that young people use emojis more frequently than others shown below.
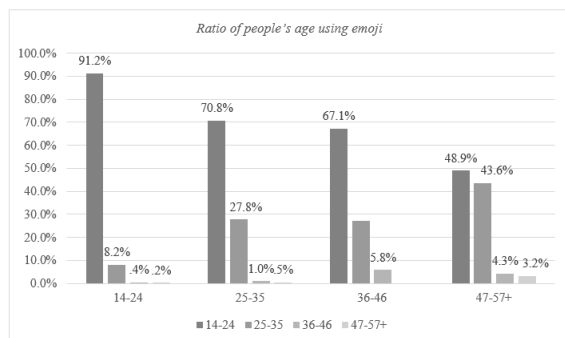
Figure 3: Ratio of people's age using emoji

Figure 3 aims to provide a more detailed breakdown of age differences in emoji use.

When we ask how older people use emojis strongly while communicating online or on the internet, the answer varies with their age (χ = 134.954, P-Value = 0.000), young people responded that youths use more. Still, this percentage decreases when people's age increases.

Emoji and Gender

Table 1 shows the gender ratio of male and female respondents in the study. In terms of gender, about 35% were men, and over 65% were women.

Table 1: Gender

Frequency		Percent	Valid Percent	Cumulative Percent
Valid Men	347	34.4	34.8	34.8
Women	650	64.5	65.2	100.0
Total	997	98.9	100.0	
Missing System	11	1.1		
Total	1008	100.0		

Figure 4 asks how much men and women use emojis in online communication and how much their emoji usage differs in percentages.

Figure 4: How often do you use emoji in internet communication? /by percent/

Figure 5 was designed to show how the most commonly used emojis are used differently by gender. How often do you use emojis in internet communication? For this question, the answer varies (χ=24.359, P Value=0.000) depending on gender. The percentage of women frequently using emojis is more significant than men, whereas the ratio of men who never use them is more significant than men. Men use "like" and "face with tears of joy" more frequently, while women use emojis with hearts ❤️🤩🥰😘.

Figure 5: Different emojis used by men and women

Frequency

Table 2 was designed to present the frequency of respondents' responses to the preference for using emojis. What are the advantages of emojis when writing messages,

Table 2: Advantages of using emoji when writing a message, comment, and post according to the participants' view

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Saving time	209	20.7	21.1	21.1
	Being polite	202	20.0	20.4	41.5
	Making a positive Impression	419	41.6	42.3	83.8
	Making colorful and gorgeous	94	9.3	9.5	93.3
	Others	66	6.5	6.7	100.0
	Total	**990**	**98.2**	**100.0**	
Missing	System	18	1.8		
	Total	**1008**	**100.0**		

comments, and posts? In this question, answers were different depending on the frequency of emoji use (χ = 37.990, P-Value = 0.000).

Those who believe that it has the advantage of making a positive impression and saving time have the highest percentage of respondents.
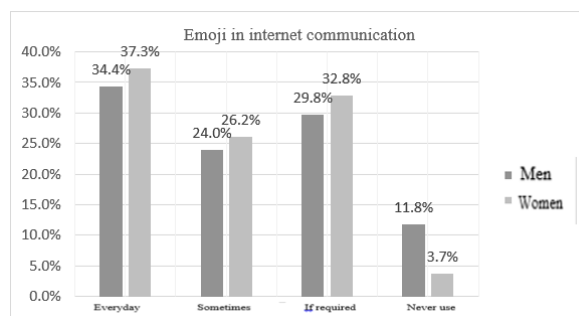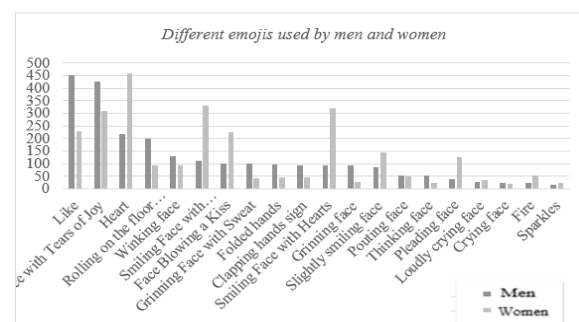
In Table 3, the following questions were asked to find out the opinion and frequency of how people feel about using emojis while communicating in the online environment. How do you feel about not using emojis when chatting, texting, and interacting with people online? The answer to the question varies depending on the frequency of emoji

Table 3: How do you feel about not using emojis when chatting, texting, and interacting with people online?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Gruff	47	4.7	4.8	4.8
	One thing seems to be missing	276	27.4	27.9	32.7
	Rude	14	1.4	1.4	34.1
	Dishonest	66	6.5	6.7	40.8
	Impolite	75	7.4	7.6	48.4
	Don't feel anything	510	50.6	51.6	100.0
	Total	**988**	**98.0**	**100.0**	
Missing	System	20	2.0		
	Total	**1008**	**100.0**		

use (χ = 133.681, P-Value = 0.000). The difference is that "one thing seems to be missing," which is the highest percentage of people who use emojis daily. From this, it can be concluded that the more you use emojis, the more likely you feel something is missing, so the use of emojis is exceeding in internet communication.

In Tables 4 and 5, we aimed not only to identify cases in which people use or do not use emojis in online communication but also to clarify which responses will be more frequent.

In table 4, we asked, "What kind of people do you use emojis to communicate with?" There is no gender-specific answer to the question (χ = 0.853, P-Value = 0.837). Men and women use the same emoji when interacting with

Table 4: What kind of people do you use emoji to communicate with?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	With all people	210	20.8	21.4	21.4
	With loved ones	611	60.6	62.3	83.7
	With people related to work or business	22	2.2	2.2	85.9
	With people I like	138	13.7	14.1	100.0
	Total	**981**	**97.3**	**100.0**	
Missing	System	27	2.7		
	Total	**1008**	**100.0**		

Table 5: What kind of people do you not use emojis to communicate with?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	With older people	302	30.0	30.9	30.9
	With government officials, people with official relations, and teachers	164	16.3	16.8	47.7
	With people made unpleasant impressions , unfamiliar, and with people stress me out	378	37.5	38.7	86.4
	Others	133	13.2	13.6	100.0
	Total	**977**	**96.9**	**100.0**	
Missing	System	31	3.1		
	Total	**1008**	**100.0**		

the same people. But for the question shown in table 5, "What people don't you use emoji to communicate with?" The question was answered differently depending on gender (χ = 9.099, P-Value = 0.028). If men do not use emojis more often than older people, women are more likely to avoid using emojis when dealing with strangers or unfamiliar people and the people who make them stress out. The use of emojis in communication

with government officials, people with official relations, and teachers is similar.

Figure 6 clearly shows the types of messages people prefer when engaging in online communication using platforms such as Facebook and Twitter.

The answer was, "What type of messages or posts do people like to write when communicating online" was different (χ = 18.957, P-Value = 0.001). Therefore, either
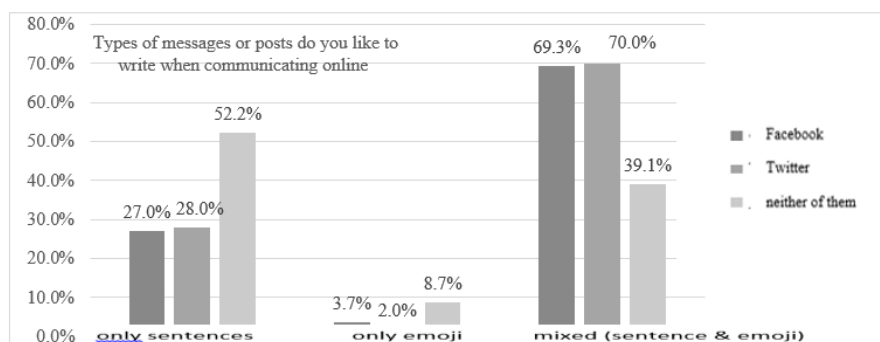
Figure 6: What type of messages or posts do you like to write when communicating online?

men or women prefer to write the mixed type of sentences and emojis together, which reveals that containing emojis in the context is one of the inseparable parts used in conversational discourse.

CONCLUSION

The Internet is a large and rapidly evolving field of social communication in which human beings can communicate with each other and exchange information in a short period with the help of specific networks, regardless of geographical location, language, cultural differences, and borders. It is time to address and study the issue of language use by Mongolian Internet users, who are keeping pace with the world's population in this area. The study of emoji use, one of the subjects of the Mongolian Internet language, is a new field of research that has not been sufficiently developed yet.

We selected Facebook and Twitter according to particular criteria from the significant social networking sites, which account for the Mongolian nation's features and peculiarities. Since the Internet language plays a vital role in today's social communication, we must adapt to its development and evolution. Still, it is essential to conform to language norms when expressing our views and opinions on the Internet.

An analysis of the case study shows that Internet users' chaotic use of the Latin alphabet continues, and there is an urgent need to focus on written language education. Furthermore, there is a need to study the computer-mediated discourse users in detail according to their age, gender, and the causes why they use the types of emoji mostly. People use emoji varies depending on their age and gender. Especially emoji choice has a significant difference between men and women. They use emojis to make a positive impression or thought to others and save time which means replacing emojis instead with a word or a sentence.

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