



Social Presence in Computer-mediated Communication of Thai EFL Learners

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Master in Teaching English as an International Language**

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ABSTRACT

According to previous research, computer-mediated communication (CMC) via social media such as Facebook can provide non-threatening learning atmosphere to foster a more relaxed and conducive learning environment to EFL learners hence enhancing EFL learners' engagement through increased social contact. Understanding Social Presence (SP) indicators can assist in improving the quality of learning through rich interaction and greater engagement. This helps to maximize the potential of CMC for English language learning. Despite previous studies that have looked at interactions in Thai contexts through the lens of SP, there is still much to be discovered. In addition, the value of Social Presence in CMC for language learners, as well as for online learning, has been previously explored in previous study. Though there are few studies on this subject in Thai EFL contexts, there is a lack of research concerning out-of-class activities that can engage students by helping them to overcome the anxiety they feel in a virtual learning environment. The aim of this study was to investigate the ways Thai EFL learners interacted in a computer-mediated communication (CMC) environment based on Social Presence (SP) and to explore learners' perception on their interaction on Facebook Messenger Group Chat. A mixed-method design was adopted. Fifty-two undergraduate learners in a university in Southern Thailand were selected and divided into groups of four to five to partake in the exchange of Facebook Messenger group messages for 7 weeks. Exchanged messages were collected and analyzed using quantitative counting to find out the frequency of SP indicators in the group chat. A set of questionnaire with open-ended questions was distributed to obtain learners'

perception. The former was subjected to descriptive analysis while the latter was subjected to thematic analysis.

Results showed that 40% of the messages were interactive responses, followed by affective and cohesive ones, indicating that when Thai EFL learners were virtually present and to appreciate others, they tended to put forward to contribute in the discussion. Furthermore, the learners demonstrated their SP by exhibiting acknowledgement, using paralanguage, using greetings and salutations respectively. Two indicators gained the least: emotion and personal advice. Surprisingly, one indicator, course reflection, was not observed in the text messages. It was found from the questionnaire that cohesive category had the highest total mean score ($M = 4.29$, $SD = .400$), followed by affective and interactive ones. The results indicated that the learners strongly agreed that the “sense of belongingness” was felt throughout the online interaction. In addition, as qualitative results, three themes emerged: building group cohesion, immediacy, and an opportunity for English interaction, suggesting that English language use via CMC was valued by the learners beyond the classroom environment.

This mixed method study shed light on how Thai EFL learners communicated and interacted digitally using English via Facebook Messenger Group Chat as a designed CMC learning environment with the meaningful negotiation. By understanding their interaction online through SP, the results of this study provided the empirical evidence of how Thai EFL learners socially and emotionally presented themselves online with the exposure to English outside of the classroom as a necessity of language input for EFL learners to build an online community. It concludes with the discussion of the SP implications, limitation and recommendations for EFL educators, learners and stakeholders.

Keywords: EFL, social presence, computer-mediated communication, language learning, Facebook group chat

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TABLE OF CONTENTS

ABSTRACT.....	v
ACKNOWLEDGEMENT	vii
TABLE OF CONTENTS.....	viii
LIST OF TABLES	x
LIST OF FIGURES	x
1. INTRODUCTION	1
1.1 Background of the Study	1
1.2 Purpose of the Study	4
1.3 Research Questions	5
1.4 Significance of the Study	5
1.5 Definition of Terms	5
2. LITERATURE REVIEW	7
2.1 Introduction	7
2.2 Social Constructivism and Social Interaction in Language Learning	7
2.4 Computer-mediated Communication (CMC) and Language Learning	8
2.5 Facebook Messenger Group Chat as a CMC Learning Environment.....	10
2.6 Social Presence: Introduction.....	10
2.7 Social Presence: How to Measure It	11
2.8 Social Presence and Different Modes of CMC	13
2.9 Social Presence: Its Importance for Language Learning	14
2.10 Previous Studies on CMC platforms in Thai Context	15
2.11 Conclusion.....	16
3. RESEARCH METHODOLOGY.....	17
3.1 Research Design	17
3.2 Participants	17
3.3 Facebook Messenger	18
3.4 Research Instruments	19
3.4.1 Text Messages in the Facebook Messenger Application.....	19
3.4.2 Social Presence Questionnaire.....	19
3.4.3 Validity and Reliability	20

3.5 Data Collection Procedure	20
3.5.1 Social Presence Questionnaires	22
3.6 Data Analysis	23
3.7 Ethical issues	24
3.8 Conclusion.....	24
4. RESULTS AND DISCUSSION	25
4.1 Results to RQ1	25
4.1.1 Social Presence Categories	25
4.1.2 Interactive responses.....	26
4.1.3 Affective responses.....	27
4.1.4 Cohesive responses.....	27
4.1.5 Summary of the observed Social Presence indicators	28
4.2 Results to RQ2	29
4.2.2 Students' Perception: Quantitative Results	29
4.2.3 Perceived English Language Learning	32
4.2.4 Student Perception of SP: Qualitative Findings	33
4.3 Discussion	36
4.3.1 RQ1.....	36
4.3.2 RQ2.....	39
4.4 Conclusion.....	41
5. CONCLUSION.....	43
5.1 Overview of the Study.....	43
5.2 Implications for EFL Context	43
5.3 Limitations and Recommendations for Further Research	44
REFERENCES	46
APPENDICES	53
Appendix: Social Presence Questionnaire	54
Appendix B: Topics for Facebook Messenger Group Chat Interaction	61
Appendix C: Certificate of Approval of Human Research Ethics	63
Appendix D: Abstract of Proceeding.....	65
Appendix E: Submitted Paper.....	76
VITAE.....	77

LIST OF TABLES

Table 1. <i>Social Presence Categories and Indicators</i>	12
Table 2. <i>Agreement Levels in the Scale Items and Range of Scores</i>	19
Table 3. <i>Data Analysis</i>	23
Table 4. <i>Frequency of Social Presence Indicators in Interactive Category</i>	26
Table 5. <i>Frequency of Social Presence Indicators in Affective Category</i>	27
Table 6. <i>Frequency of Social Presence Indicators in Cohesive Category</i>	28
Table 7. <i>Social Presence Indicators Ranking from Highest to Lowest Frequency</i>	28
Table 8. <i>Mean and Standard Deviation of Each SP Category</i>	30
Table 9. <i>Mean and Standard Deviation of Cohesive Category</i>	30
Table 10. <i>Mean and Standard Deviation of Affective Category</i>	31
Table 11. <i>Mean and Standard Deviation of Interactive Category</i>	31
Table 12. <i>Mean and Standard Deviation of Perceived English Language Learning</i>	32

LIST OF FIGURES

Figure 1 Data Collection Procedure.....	22
Figure 2 <i>Percentage Distribution of Social Presence Category</i>	26

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1. INTRODUCTION

1.1 Background of the Study

Nowadays, the ways people communicate and learn have been influenced by the advancement of technology. According to Chapelle (2003), technology has become normal and expected means of communication and education. Vivolo (2016) also states that technology is now part of humans' daily lives as it allows people to connect with others and gain knowledge at their own convenience. It is safe to say that searching for information and keeping in touch are uncomplicated as it can be accessed easily when people go online (Yang & Chen, 2007).

In English as foreign language (EFL) learning, the impacts of technology on how learners learn have been acknowledged (Yamada, 2009; Dudeney & Hockly, 2008; Kear, 2010; Chun, Kern, & Smith, 2016). For an instance, Dudeney & Hockly (2008) mention that there are several reasons why technology is advantageous to English language teaching (ELT) and learning practice. They mention that time and distance are unrestricted as learning materials are available online even beyond physical classrooms. Also, young learners use technology and it becomes a usual part in their day-to-day lives. Lastly, Dudeney and Hockly (2008) emphasize that technology can support how young learners learn and communicate to develop English skills via collaboration.

As the ability to communicate effectively is one of the goals of ELT (Hedge, 2000), part of technology-related use which can afford an opportunity to practice conversation and link learners together is called computer-mediated communication (CMC). According to Murray (2000), CMC is any interaction between people by means of computer. Simpson (2002) states that CMC can be accessed when connected to Internet. Consequently, to Simpson, human interaction can be made possible locally or globally via online.

CMC can provide a useful environment for language learning. Barrs (2012) investigated the use of CMC to provide a learning platform for learners in one of the universities in Japan. The results indicated that the use of CMC program can provide a convenient and beneficial environment for learners to continuously interact in the target language after school. However, Barrs (2012) took into account the necessity of input from the teachers and among learners to build meaningful community online.

Mahdi (2014) reviewed related studies to understand how CMC environments are utilized to promote language learning. Based on the findings, CMC can promote interaction between a teacher and learners, and also among learners themselves. To promote language learning in CMC environments, the negotiation of meaning is fostered and the learners feel at ease. Meanwhile, native speakers of the target language can be accessible for interaction at anytime and anywhere via CMC, if appropriately designed, thus giving language learners exposure to the target language.

With the affordances of CMC, Social Presence (SP) is one of the learning environment components which is considered to be explored in this study as it helps determine how language learners communicate digitally. In 1976, Short, Williams and Christie (1976) developed SP theory and aimed to describe the influence of communication medium on the way people interacted during the rise of telecommunications since it lacked verbal and non-verbal cues.

There are several denotations given to the term Social Presence (SP). Initially, it was defined as the “degree of salience (i.e., quality or state of being there) of the other person in the interaction and the consequent salience of the interpersonal relationship” (Short et al., 1976). It was then interpreted by Gunawardena (1995) as the degree of a person being identified as “real person” in mediated communication as how participants project themselves socially and emotionally. Finally, for Wu, Gao and Zhang (2014), SP is the “sense of being together with other people in a networked environment” (p. 230).

With the aforementioned definitions of SP, the term is defined in this study as a student’s ability to put over his or her true self and to appreciate one another, particularly in a digital world, and as a means to create a welcoming community that shares common grounds. When learners feel comfortable and free to present themselves during conversation the online interaction becomes an engaging place to be a learning environment. Garcia-O’Neill (2016) states that when learners are able to express their thoughts and feelings, and to communicate with each other using a target language, SP can foster learning.

SP influences interaction online among learners because it determines how they interact and communicate. According to Elverici & Karadeniz (2018), it can increase communication among learners. Their study identified the SP through social media and

concluded that having an improved SP can create enriched a learning environment for foreign language learners. Ubon and Kimble (2003) point out that SP supports more social interaction, learning satisfaction, in-depth discussions, and collaborative learning. Therefore, SP can assist EFL learning and teaching to increase engagement and participation.

To assert that SP is deemed vital to language learning as it makes the interaction rich, Devi, Amir and Krish (2017) point out that the technology is probably the emphasis of computer-mediated communication, but it is the SP that creates a productive environment as it aims to encourage learners to socially and emotionally represent themselves despite the paucity of social cues in a CMC environment.

Furthermore, learners' willingness to communicate (WTC) using the English language depends on the mode of CMC. Le, Cunningham & Watson's (2018) study of the relationship of SP and WTC revealed that text and audio chat which are deemed to have low SP are better considered than video chat which has been considered high with SP. Therefore, it suggests from their study that when learners have the capacity to choose their SP, apprehensive learners can be encouraged and their WTC builds up. Also, it is encouraged to utilize the SP categories and indicators to further examine and verify previous results regarding SP. As a result, the findings might shed light on how to help EFL learners to interact to each other in a meaningful way.

Previous literature suggests that SP can be measured in order to for teachers to support learners in a CMC learning environment via an analysis of online discussion. To measure SP, Rourke, Anderson, Garrison & Archer (1999) developed indicators of SP in which the focal point is given to the affective, interactive and cohesive responses. Affective responses deal with emotion, humor, paralanguage and self-disclosure; cohesive responses relate to greetings, group references, social sharing and vocatives, which refers to addressing a participant by name; lastly, interactive responses pertain to acknowledgement, agreement and disagreement and inquiry. Although previous studies show the amount of investigation of SP in CMC, it is important to address the influence of SP in naturally occurring conversation among EFL learners. This could be useful to promote their English communication practice outside of the classroom wall.

These indicators were helpful to analyze how discussions happen online. Devi, Amir and Krish (2017) posit that learners perceive that they were able to socially interact

in online tasks and they perceive that SP of others affected their own representations in the discussions. The authors claimed that they could understand the way learners learn and interact in a CMC environment based on the categories of SP. However, interactive category was the most frequent indicator revealed from their study. Therefore, further studies on the other two categories should be explored to understand SP thoroughly as well as to reaffirm or reject their results in other contexts such as in Thai EFL context.

Furthermore, Facebook can be a bridge to promote SP and bring it to the attention of EFL learners—particularly Thai learners, who often utilize social media in their daily lives (Gordon, 2014). Many people in the CMC believe that FB promotes language acquisition; however, few researchers have addressed this in the Thai educational setting in regard to SP.

According to Lin (2015), previous studies have addressed the effects of computer-mediated communication in non-Thai contexts. His meta-analysis found out that the studies on CMC had been widespread research in EFL Asian learners; however, China was the most often studied. Little has been done on the issue of SP in CMC in the Thai contexts. The concept of SP has been studied in various digital learning platforms; however, there is a dearth of research about SP in CMC learning environments such as Facebook Group Chat in Thai EFL contexts. It is argued in this study that an understanding of SP among Thai EFL learners would help visualize their online interactions via CMC so that an appropriate way of support can be provided to such learners.

1.2 Purpose of the Study

Rich interaction among EFL learners is pivotal for learning as they can learn from social interaction with others. As SP enables us to determine how learners interact online and is suggested to develop a rich and meaningful CMC learning environment, it may be beneficial for EFL learners.

The purpose of this study is to examine Thai EFL learners' SP in computer-mediated communication in Songkhla Rajabhat University as well as exploring their perception on the influence of a CMC tool, Facebook Messenger Group Chat, to learners' SP.

1.3 Research Questions

This study is driven by the following questions:

1.3.1 What indicators of SP can be observed during the exchange of text messages in Facebook Messenger Group Chat by Thai EFL undergraduate students?

1.3.2 What are Thai EFL students' perceptions of SP in text-based interaction?

1.4 Significance of the Study

Online language learning across the world is rampantly being promoted as it is now highly regarded as cost-effective and convenient, investigating how learners interact online and exploring perceptions of SP are important so as to expand understanding on online learners in mediated interaction using technological tools like Facebook Messenger Group Chat (Gunawardena & Zittle, 1997). Moreover, CMC environments become an integral part of learning. Activities that have been previously conducted in classrooms are now transitioned to the web. As a result, teachers and educators attempt to maximize the affordances of these online platforms, particularly for language learning. In building and exploiting CMC-based learning environments such as Facebook Messenger Group Chat, to increase engagement, this study may prove to be essential for EFL stakeholders, teachers and learners. It may also shed light on teachers' ways to support learners to maximize the use of CMC platforms in EFL classrooms. Finally, language learning designers may also benefit as the results of this study such as the indicators and perceptions may be considered for inclusion in the process of lesson planning.

1.5 Definition of Terms

Following are the definitions of the key terms used in this study.

Computer-mediated communication refers to human interaction via computers that occurs on the Internet (Murray, 2000).

Social Presence is the ability of the members of a networked environment to present them to be recognized as 'real' people and sense the feeling of belongingness (Garrison, 2016).

Social Presence Indicators refers to the categories and indicators that were developed by Rourke et al., (1999) to determine the observable behaviors of people in CMC.

1.5 Conclusion

In this chapter, background of the study, the purpose of the study, research questions, significance of the study and definition of terms were presented in order to gain better understanding of the rationale of the study. In the next chapter, the literature review of this study was devoted to providing additional in-depth information regarding the research that were discussed in this chapter. In the third chapter, the methodology part, research design, participants, instruments and data collection procedure were carefully addressed. In the fourth chapter, the results and findings was discussed and in the final chapter, it was the presentation of the conclusion of the study.

2. LITERATURE REVIEW

2.1 Introduction

A considerable amount of literature has been published on SP in computer-mediated communication (CMC). The discussion of SP theory emerged during the 1970s by Short, Williams and Christie (1976) with the evolution of telecommunication. SP in online learning has suggested to be used in order to measure how learners interact in remote communication.

The aim of this chapter is to provide, through selective references to some of the literature including social constructivism, a clearer understanding of SP in CMC and its significance to English language learning and teaching.

2.2 Social Constructivism and Social Interaction in Language Learning

Social constructivism is helpful to understand how social interaction takes place for language learning. According to Saville-Troike & Barto (2017), social constructivism was originated by Lev Vygotsky's notion that learning happens through social interaction. They explain that the access and participation in a learning community are crucial to become successful learners. Lightbown & Spada (2006) assert in the view of social constructivism theory that people are able to regulate their cognitive process actively because of the influence of what others say to them and what they say to others. In this case, contact with others plays a vital role in the learning process. Ortega (2009) mentions the importance of interpersonal interaction. He explains that it is "communicative events and situations which occur between people" (p. 119).

Part of the learning theory in social constructivism is the zone of proximal development (ZPD) which is also introduced by Vygotsky. Ortega (2009) proposes an explanation that ZPD takes place when learners are able to highly perform because of the assistance of someone who is more knowledgeable than they are. This means that the lack of knowledge can be filled through guidance and help in order to eventually initiate themselves to show their knowledge and skills through social interaction via communication.

Literature has suggested the crucial role of social interaction in language learning. Saville-Troike & Barto (2017) term interaction as interpersonal interaction which refers to an exchange of information between people. They explain this term

specifically to interaction between learners and experts. Therefore, interaction is one of the essential elements in language learning. According to Yamada (2009), meaningful communication is built upon interaction. Through interaction, learners are able to process comprehension, prompt them to respond and eventually, contribute to the conversation. Long (1981) explains that communication skills are enhanced through conversation between people.

Moreover, Saville-Troike & Barto (2017) explains that interaction is a process of acquiring second language in communicative situations that assist and form the progress of learner's language development. The benefits of interaction lie upon collaborative expression, modified input, feedback and negotiation of meaning. Therefore, the acquisition of language is situated from the opportunities for use. Also, the advantage of language learning can be taken from the learners' active involvement and participation in social interaction. Because of the advance of technology, today's social interaction does not take place in a face to face setting, but also in an online environment mediated by computer or digital technology.

2.4 Computer-mediated Communication (CMC) and Language Learning

To understand how communication is enhanced by technology, this section explores a notion of communication-mediate communication. Murray (2000) points out that computer-mediated communication is communication between people by means of computer. CMC can also be described as "any communication pattern mediated through the computer" (Metz, 1994, p. 32). Simpson (2002) states that CMC is a human communication with the use of computer taking place on the Internet.

Hirvela (2006) mentions the two types of CMC: synchronous (real-time communication i.e. Instant messaging, audio/video conferencing) or asynchronous (delayed communication i.e. email, online discussion/bulletin boards). In asynchronous computer-mediated communication (ACMC), according to Chapelle (2003, p. 23) learners can "read/speak and write/hear electronic messages, which are stored on a server to be produced and accessed anytime, so the process of communication can be spread out across hours, days, weeks or months." On the other hand, synchronous computer-mediated communication (SCMC) takes place in real-time communication (Barret, 2008) and seems to be similar to face-to-face interactions as per time

dependence (Walther, 1993) however, SCMC confirms the elimination of place-dependence because participants/interlocutors are not expected to be together in a particular location (McAndrew, Foubister & Mayes, 1996 cited in Yamada, 2009).

It is beneficial to examine CMC as it provides additional resources outside of an actual classroom atmosphere. Hirvela (2006) stated that CMC enables learners to be connected with one another through networked computers in or outside the classroom. Blake (2000) suggests that there is an increase chance of accessibility to use CMC beyond classroom environment.

Furthermore, Warschauer (1997) explains that there are distinct characteristics of CMC that allows collaborative learning: 1) text-based and computer-mediated; 2) many-to-many communication; 3) time-and-place-independence; 4) long distance exchanges; and 5) hypermedia links. Zeng & Takatsuka (2009) examined learners' dialogue in synchronous task-based CMC. The result showed that through collaborative dialogue, the language forms were able to be dealt with by the learners in their language learning. Ajabshir (2018) investigated the effects of synchronous and asynchronous CMC on EFL learners' pragmatic competence. In his study, he paired the learners to discuss a given topic. The findings showed that collaboration was achieved through meaningful interaction supported by CMC.

However, literature has showed mixed results of CMC for EFL learning environments. CMC is deemed to lack of nonverbal cues which are essential in communicative learning (Vrasidas & McIsaac, 1999). Wong (2007) states that when there is lack of physical and social cues, there will be a tendency for the interlocutors to misinterpret each other. Although this is an issue of CMC, other studies have shown that this paucity also has positive effects on learners' perception. For example, in Le, Cunningham & Watson's (2018) study of investigation of EFL learners' willingness to communicate in Vietnam, the results revealed that learners preferred to communicate more via text and audio chat which lacks verbal and nonverbal cues. The learners perceived that the two forms of CMC (texts and audio) enabled them to openly exchange information with a less threatening conditions.

2.5 Facebook Messenger Group Chat as a CMC Learning Environment

According to Bucher (2018), Facebook Messenger (a.k.a. Messenger) was launched in 2011. Blattner & Fiori (2009) compare Facebook to regular email as private messaging can be readily accessible and also considered as a communicative tool. They also mention that educators must take advantage of this technology as this has been part of learners daily e-routine.

Facebook Messenger has a function called Group chat, allowing users to connect to each other via communication. Thus, it can provide users with a communication space for language learners to practice communication skills. Thus, it may be considered as a CMC learning environment if designed for educational purposes. In exploiting Facebook for educational purposes, Wang & Qi (2018) mentioned Facebook Messenger as one of the social media that can be used to provide immediate feedback and transfer targeted contents in various forms such text, picture, audio or video. Mabuan & Ebron, Jr. (2017) stated in their study of Facebook integration into university classrooms, that in some events, learners use the private messaging feature of Facebook to ask questions or to clear something up, regarding their lessons. They also mentioned that they used this because they aimed to motivate learners to practice what they have learned from the class and clarify confusions that they have encountered in their English class.

2.6 Social Presence: Introduction

Before computer-mediated communication became known, Short, Williams and Christie (1976) developed SP theory (see Ko, 2012). The initial definition of SP is “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (Short et. al., p. 65). Garrison (2016) states that during the time of telecommunications, the lack of nonverbal cues was noticed. As a result, Short et. al. concentrated on studying the quality of the medium to enable the people to socially and emotionally present themselves. However, the concept of SP has evolved as online communication has been changing because of the continued development of new technology.

Other researchers give their descriptions of SP with the emphasis on the level, similar to the original definition. Gunawardena & Zittle (1997) define SP as “the degree to which a person is perceived as “real” in mediated communication” (p.8). McIssac &

Gunawardena (1996 cited in Scollins-Mantha, 2008) relates the construct to how much individuals in their environment perceive themselves in the company of others. In general, SP, emphasizing on the level or extent, tells how much (i.e. low or high) people can perceive themselves or others to be real while interacting via digital channels (Lowry, Roberts, Romano, Cheney, & Hightower, 2006; Elverici & Karadeniz, 2018).

Furthermore, SP is also deemed to be an ability in which members can introduce and bring out their personalities in a community to recognize their actual existence, particularly in online environment. Garrison & Anderson (2003 cited in Devi, Amir & Krish, 2017) defined SP as the ability of people involved in a group to present themselves at which they connect with people and show their feelings, so as to appear as 'real' through a mediated communication. Rourke, Anderson, Archer & Garrison (1999) mentioned that by using emoticons, telling stories or using humor while they communicate in online learning environments, online learners have the capability to project themselves as being 'real' and are able to join together with others in digital environments so as to provide access and communication.

Furthermore, Biocca, Harms, and Burgoon (2003 cited in Akcaoglu & Lee, 2016) defined SP as "sense of being with another" (p. 456). According to Kear (2010), SP is associated with participants' need to feel the 'sense of belonging to a group' (Tu & McIsaac, 2002) as well as to recognize each other as 'real people'. Hence, Scollins-Mantha (2008) explains that SP does not only suggest being together, but also being engaged with others in an interaction.

This study situates SP as one's ability to put over his or her true self and to appreciate one another, particularly in a digital world, so as to create a welcoming community that shares common grounds. When learners feel comfortable and free to communicate with their fellow learners, the community becomes an engaging platform to be a learning environment.

2.7 Social Presence: How to Measure It

Rourke et al. (1999) developed a template which provides a framework for researchers to recognize SP in online interaction in distance education. They aimed to identify the observable behavior of learners interacting via a networked communication environment.

According to literature, SP entails three kinds of categories. First, affective responses deal with emotion, humor, paralanguage and self-disclosure. Then, cohesive responses relate to greetings, group references, social sharing and vocatives, which refers to addressing a participant by name. Lastly, interactive responses pertain to acknowledgement, agreement and disagreement and inquiry. These three categories and indicators of SP are listed in Table 1.

Table 1. *Social Presence Categories and Indicators*

Indicators	Definitions	Codes	Sources
Affective Category			
Paralanguage	Text features to express emotion (i.e. emoticons, exaggerated punctuation or spelling); creative expressions of emotion	PL	Swan & Shih, 2005; Rourke et. al, 1999
Emotion	Expression of emotions using adjectives (i.e. love, sad, hate, silly)	EM	Swan & Shih, 2005
Value	Statement of personal point of views (i.e. values, beliefs & attitudes)	VL	Swan & Shih, 2005
Humor	Humor usage (i.e. teasing, cajoling, irony, sarcasm, understatements)	H	Swan & Shih, 2005; Rourke et. al, 1999
Self-disclosure	Revelation of personal details and demonstrating vulnerability; talks about life experiences beyond class	SD	Swan & Shih, 2005; Rourke et. al, 1999
Interactive Category			
Acknowledgement	Direct reference to contents of members' messages	AK	Swan & Shih, 2005
Continuing thread	Utilization of software's reply button	CT	Rourke et. al, 1999
Agreement/Disagreement	Expression of agreement or disagreement with members' messages	AG	Swan & Shih, 2005; Rourke et. al, 1999
Approval	Extension of support, compliments, appreciation, commendation, praise	AP	Swan & Shih, 2005
Asking Questions	Raise questions to others or to the teacher; response invitation	AQ	Swan & Shih, 2005; Rourke et. al, 1999

Personal Advice	Attempt to give suggestions or advice	PA	Swan & Shih, 2005
Cohesive Category			
Greetings & Salutations	Use of social function language to communicate casually; application of greetings and closures (includes feeling questions as general greetings or interaction opener)	GS	Swan & Shih, 2005; Rourke et. al, 1999
Vocative	Reference to members by mentioning names	V	Swan & Shih, 2005; Rourke et. al, 1999
Group Reference	Cite the group with “we”, “us” or “our”; words/phrases that demonstrate inclusion (i.e. let’s, shall we)	GR	Swan & Shih, 2005; Rourke et. al, 1999
Social Sharing	Small talks especially unrelated to the topic or random socializing	SS	Swan & Shih, 2005
Course Reflection	Course-related reflection or sharing evaluation about the course	RF	Swan & Shih, 2005

**Adapted from Swan and Shih (2005) and Rourke et. al., (2001)*

2.8 Social Presence and Different Modes of CMC

When interaction occurs with technological tools, different modes of CMC emerge which include video, audio and text. These various modalities provide different degree of SP as these modalities affords respective features (Lowenthal, 2009).

Ko (2016) explains that interaction with video is deemed to have high level of SP as it can provide visual cues that are similar to face-to-face interaction. According to Garrison, Anderson & Archer (1999), visual cues are essential to conversation because they could inform intentions of the interlocutors. To these authors, when visual cues are present, participants in a conversation tend to comprehend the messages being conveyed. Although video interaction has a high level of SP, it is still avoided, depending on participants’ personalities because of their fear to lose face (Le, Cunningham & Watson, 2018).

Unlike video-based interaction, audio-based interaction affords tone of voice that can also be a prompt for understanding conversation. Yamada (2009) found out that voice-based interaction foster awareness of natural communication and comfort.

However, Bueno Alastuey's (2011) study of synchronous voice-based CMC showed that learners became self-conscious of their low level or they fail to understand their respective partners.

Finally, text-based interaction has been considered to have low SP and impersonal due to its lack of social cues (Garrison et al., 1999). However, High & Caplan (2009) argue that the lack of nonverbal cues can help lessen the anxiety of communicators and interpersonal interaction can also be yielded.

2.9 Social Presence: Its Importance for Language Learning

According to Stewart (2012), learning is developed through social interaction based on Vygotsky's social constructivism. Hence, Yamada (2009) conveys that CMC provides successful results in communicative language learning as social interaction is being fostered.

Language learners need to feel the comfortability in an online learning environment in order to participate in the group conversation without hesitations and to be able to gain the satisfaction that online learning community provides (Kear, 2010). According to Garrison (2016), SP in mediated communication could foster fruitful learning community. Devi, Amir & Krish (2017) imply that creating a productive learning environment depends on the learners' SP.

In Yamada's (2009) investigation of the effect of CMC forms on SP perception as well as the relationship between perception and output, the results showed that affective was greatly influenced by the use of voice communication. Moreover, Ko's (2016) study on the clarification of relationship between task types and foreign language learners' SP in text-based synchronous CMC learning modes where he investigated 38 high-intermediate level of English as foreign language learners from different fields of a university in Taiwan. He found out that task types impact the EFL learners' SP development in synchronous CMC. Also, he mentioned that image of the learners using webcam seemed to improve learners' SP perception.

Lowenthal (2009) emphasizes the role of teachers to create a meaningful and purposive communication environment. He adds that when placing learners to an online environment, it is important to establish and maintain SP because SP enables

participants to sense themselves and others as real, and therefore build a quality interaction that is needed to enhance language learning.

Kim, Kwon and Cho (2011) concludes their research on investigating factors of SP and learning outcomes in Korea with practice implications. They suggest that quality interaction can be facilitated by making a full use of effectiveness of CMC tools; hence learners will be more engaged and satisfied with their learning.

Regarding the linguistic aspect, SP affects the accuracy and fluency of learners when communicating in CMC environment. Yamada (2009) discovered that learners become more aware with their grammar accuracy more than in videoconferencing. It is because learners can be given ample time to reflect on language structure. Lee (2002) pointed out that communicators are able to check their messages first before sending their messages. On the other hand, while voice communication enables learners to speak naturally, videoconferencing allows learners to express themselves more thru verbal social/nonverbal cues that facilitate the accuracy of their intended during conversation.

2.10 Previous Studies on CMC platforms in Thai Context

There have been various research has been done in computer-mediated communication (CMC) in EFL context. According to Vrasidas & McIsaac (1999), CMC is considered to be advantageous to language learning.

Jiang and Ribeiro (2017) systematically compiled literature reviews of the impact of computer-aided peer review on ESL/EFL writing, including Thailand. Their findings supported prior study on the impact of peer feedback and CMC in second language acquisition (SLA). Also, the findings acknowledged the favorable influence of computer-mediated peer written feedback on the development of writing in adult ESL/EFL classes. However, participants' language competency and technological fear were identified as variables that potentially affect the impact of this method.

In addition to the advocacy of CMC for writing skills, Un-udom, Jampeehom and Chaidet (2017) explored the impact of synchronous CMCs on the level of speaking anxiety and speaking fluency of Thai EFL students. Their results revealed that after the preparation of the speaking task by chatting in English, participants in the experimental team may lower their anxiety, and may improve speaking fluency.

Facebook group and messenger as CMC platforms were used to investigate negotiated engagement for ESL. Jenpradab and Kongthai (2017), for example, revealed that students who employed negotiated meaning tactics while interacting via CMC attained discussion goals and overcome challenges. Moreover, their results also showed that using this medium may help students gain information and practical experience, both of which are important in the future employment.

Although various studies have been done on CMC and Facebook in Thailand, SP concept are particularly explored in e-commerce (Pongpaew, Speece and Tiangsoongnern, 2016; Kittiphansophon, 2016) which is unrelated to this study. Therefore, this study may contribute to the dearth of studies on SP in EFL context in Thailand.

2.11 Conclusion

In this chapter, a review of key concepts including social constructivism as the pedagogical belief, SP, CMC and importance of interaction in language learning was presented. Then CMC and Facebook Messenger Group Chat were introduced with their constraints and affordances. Finally, SP and its importance on language learning which were related to the research questions of this thesis was reviewed. At the end of the literature review, it was highlighted that a need for further research on online interactions in EFL Thai contexts using the concept of SP in Facebook Messenger Group Chat as one of the CMC environments. In the following chapter, the research method, data collection tools and procedures and the details of the study were presented.

3. RESEARCH METHODOLOGY

This chapter provides further details of the methodology and procedure undertaken to collect data to analyze and answer the research questions.

3.1 Research Design

With the mixed method research design, both quantitative and qualitative methods were used to collect and analyze data in the present study. According to Creswell (2014), the mixed method research design allows a researcher to gain thorough understanding of a research problem or phenomenon. Moreover, case study approach (Kumar, 2011) was deemed helpful because this study conducted an in-depth investigation of a particular situation of a group of Thai EFL learners that is to explore SP in CMC at a university in the Thai EFL context at a particular time.

Regarding the present study and its interests, and in agreement with the nature of the mixed method design approach, quantitative counting of the coded indicators, survey and qualitative data from open-ended questions and interviews were utilized to investigate the research questions. The first research question was to identify the indicators noticed in a virtual communication in the initial process. Then, frequency count was used to address its concerns. The survey, open ended-questions and interviews were designed to address the second research question, that is, to discover learners' way of interaction online based on their perception on SP.

3.2 Participants

This study focused on the social interaction on the Facebook Group chat by 52 Thai 3rd year undergraduate students from the Faculty of Science and Technology at Songkhla Rajabhat University in Songkhla Province, Thailand. Specifically, the students were from Biology major and Computer Science major, respectively. The participants' language is Thai, and English is used as a foreign language. There were 11 males and 41 females from 18 to 23 years of age.

As the present study is concerned on investigating experiences and perceptions of SP in CMC in Thai EFL context, the learners were selected with purposive sampling because of the characteristics of the particular case – the participants were chosen as

they were registered to in English for Conversation class with using Facebook Group Chat as a designed CMC learning environment. English for Conversation class is an extracurricular, and a non-credit course to provide basic conversation practice for 3rd year undergraduates in the faculty.

Additionally, Facebook Group Chat was the CMC platform used in this study because of its popularity among Thai students. Based on the survey before the project, 42.2% of the learners use Facebook Group Chat two to three days a week. 86.7 % of the students use Facebook Messenger Group Chat to talk about topics that were unrelated to school matters with their peers. Also, two of the students mentioned that they used it to save, download and recover files related to homework or projects.

3.3 Facebook Messenger

Considered as a CMC tool, Facebook Messenger Application, a messaging application was used in this research. A Group Chat activity was conducted with the use of either two modes of devices: mobile phones or computers. Mobile phones were generally used by the students in this context as it was compact and handy. Computers/laptops were used in case they were in the comforts of their home. Either way, learners could utilize these modes, depending on their ease of use, as long as it was connected to the Internet in order to access a designed CMC environment via Facebook Messenger Application during the project.

In addition, as learners were divided into many groups, Facebook Messenger Application was compatible for this study. According to Viertel (2019), Facebook Messenger allows a maximum of 50 participants for group conversations.

Most importantly, Facebook Messenger was used because of its popularity among young people in Thailand. Reported in Bangkokpost.com, Leesa-Nguansuk (2018) stated that the number of Facebook Messenger users in Thailand was ranked seventh globally. It was therefore deemed that this application could be convenient for the participants in this study.

3.4 Research Instruments

3.4.1 Text Messages in the Facebook Messenger Application

In order to answer RQ1, the learners in the preliminary activity exchanged messages through Facebook Messenger Application. They were provided with topics to exchange messages as communication online. After the online activity, the text messages were screenshotted by the teacher-researcher through the use of the Print Screen Key of the computer/laptop. Screenshots were preferred because of the stickers, emoticons or other features of the Messenger that participants utilized during the online text-based conversation.

3.4.2 Social Presence Questionnaire

For RQ2, the questionnaire was adapted from an instrument used by Swan and Shih (2007) in their research. On the grounds of relevance, it was slightly modified based on Rourke et al., (2001) and Swan's et al., (2005) SP category.

The items in the questionnaire were translated in Thai because the native language of the learners is Thai; thus learners might be comfortable to respond in their native language. The use of translation by a research assistant was to avoid confusion and to facilitate better understanding among the learners involved in this study.

The questionnaire was divided into two parts. The first part included eighteen items with a five-point Likert scale to express how much the participants in this study agreed or disagreed with each statement. This was to assess the learners' perception of SP using online text-based interaction quantitatively. The second part consisted of open-ended questions, treated as a tool for collecting qualitative data, for in-depth and unexpected information which revealed the learners' perception of SP.

The students' agreement levels in the scale items and the range of scores are demonstrated in Table 2.

Table 2. Agreement Levels in the Scale Items and Range of Scores

Score Ranges	Agreement Levels
1.00 – 1.79	Strongly disagree
1.80 – 2.59	Disagree

2.60 – 3.39	Uncertain
3.40 – 4.19	Agree
4.20 – 5.00	Strongly agree

Note. From Classroom Teachers' Views on the Use of Humour in Education Process (Ağçam & Serkan Ünsal, 2009)

3.4.3 Validity and Reliability

As per Drost (2011), reliability is a constant measurement. It means that by using instruments with another set of participants or in different conditions, the result will be consistent. Thus, the measurements can be replicated. On the other hand, Drost (2011) also mentions the importance of validity. Validity is referred to measuring what is intended to measure. The following instruments were used and explained in sequence:

- **Social Presence Category (Inter-coder Agreement Method)**

Inter-rater reliability was checked and discussed by an expert who is in the field of English and Applied Linguistics, and the researcher regarding the use of the SP Category that was adapted from Swan et al., (2007) and Rourke et al., (1999).

- **Social Presence Questionnaire Piloting (Cronbach Alpha)**

Initially, the questionnaire developed by Swan et al., (2007) and Rourke et al., (2001) was used in this study. The items were checked by three experts, who are English Language lecturers in tertiary levels, using Item Objective Congruence (IOC) based on the score range of -1 to +1. From the results, the questionnaire was slightly modified in its language and content according to the needs of this study.

The questionnaire was still piloted to another group of the 3rd year undergraduate students in Faculty of Science and Technology who were not the target sampling but with the same background similar to the selected participants in this study. It was then statistically analyzed. Its Cronbach Alpha was .882, showing that the questionnaire was reliable.

3.5 Data Collection Procedure

To do so, only the learners' responses were collected. Initially, the text messages were coded based on categories and indicators of SP (Swan & Shih, 2005; Rourke et al.,

1999). Then, a frequency count was applied to identify the rate at which each indicator occurred.

The study was conducted from November 2019 to February 2020, and was administered for 7 weeks. Before the activity, the participants were randomly divided into 10 groups of four to five in the class, and they were asked to join the Facebook Messenger Group Chat. The participants were asked to use English only when exchanging messages. The teacher-researcher created a group chat for each group. In essence, there were four learners in a group chat, with the addition of the teacher-researcher in each group to monitor and prompted the conversation that occurred in online group chats.

One week prior to the activity weeks was allotted for the learners' familiarity of the technology tool, instructions, and fellow group members. The first week served as the "practice week." This practice week was not included in the collection of data. During the practice week, the learners were given sample topic and procedures. Also the teacher-researcher modeled questions and answers to provide ideas on how the interaction online would take place.

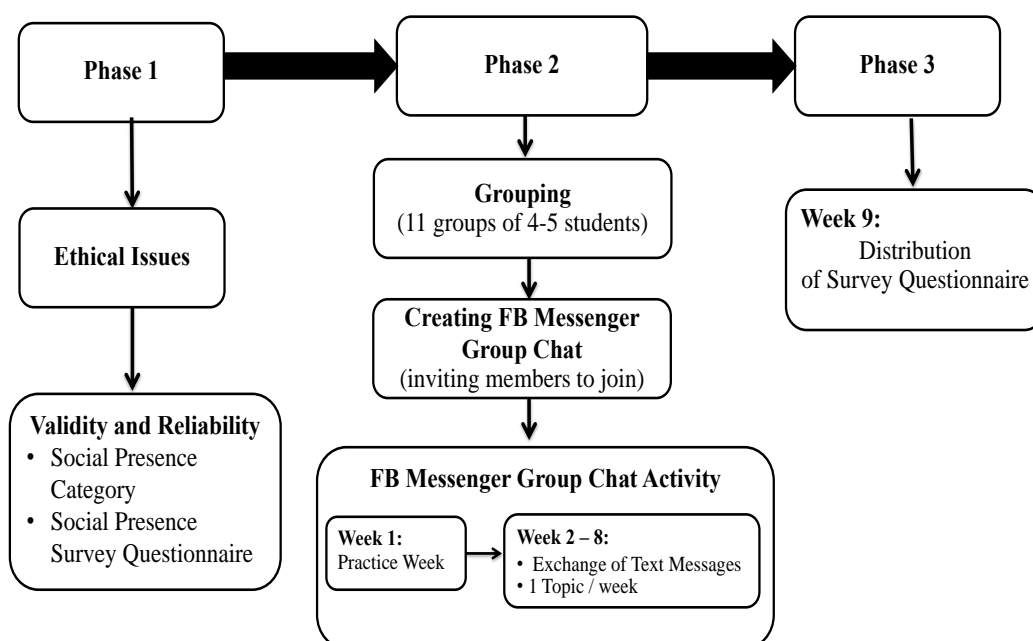
The English for Conversation course followed a particular outline of topics to be taught in which the teacher-researcher adhere to. The real classroom lesson plans were designed with grammar reviews and conversation strategies that were presented in lectures and/or activities. Meanwhile, the Group Chat activity in this study which was the exchange of messages in Facebook text chatting was done outside the real classroom at any time during the week period of each topic to provide additional interaction and practice of the English use without assessment. For this reason, the topics introduced to Facebook Messenger Group Chatting were only based on the topics in English for Conversation course curriculum, and did not intend to intervene. See topic outline for Facebook Group Chat Interaction on Appendix B.

Moreover, the teacher-researcher served as the moderator, facilitator and motivator in order to encourage learners to participate in the interaction. According to Gonzalez's (2003) taxonomy of chat, the moderator's role in practice chat is to demonstrate rules and turn-taking styles. The teacher-researcher depended on scaffolding techniques by using starting sentences, prompt phrases and accepting non-verbal responses such as emojis or stickers (Knutson, 2018).

The group chat activity began with a practice week and continued with 7 weeks for the group chat activity. In each week, each group was given a topic that prompted them to converse with one another online in the Facebook Messenger. The topics were the same with all groups. Each topic was posted by the teacher-researcher every week.

The topics were carried out in the text-based mode and the participants were allowed to use either their mobile phones or computers outside the English for Conversation class. The learners were encouraged to communicate in English according to how they naturally chatted online such as the use of emoji symbols, stickers, and humor. However, they were not forced. Depending on the learners' preferences, they responded immediately or responded in their convenient time for as long it was within a week. The teacher-researcher initiated and reminded the learners when the topic of the week would end.

Figure 1 Data Collection Procedure



3.5.1 Social Presence Questionnaires

After the group chat activity, the distribution of the survey questionnaires was managed. The researcher was accompanied by a Thai assistant who might provide clarifications. Among the 52 learners who participated in the group chat activity, 45 learners responded to the questionnaire due to absences.

3.6 Data Analysis

Data analysis of this study involved the data gathered from the screenshots of text messages, questionnaire.

RQ1: What indicators of SP can be observed during the exchange of text messages by Thai EFL students?

This study analyzed the screenshots of the text messages from Facebook Messenger Group Chat through coding based on the categories of SP (Swan et al., 2007 & Rourke et al., 1999) to search for observable behaviors of the students in the group chat activity. It was followed by counting the frequency of the indicators to quantify what indicators occurred during the exchange of messages.

RQ2: What are the students' perceptions on SP in online English language learning?

In order to discover learners' perception of SP in CMC environment, the following methods were utilized: quantitative data were collected from a survey questionnaire with the 5 Likert scale. Regarding SP, the collected score was analyzed by descriptive analysis to find the mean and standard deviation.

In addition, responses from open-ended questions included in Part 3 of the questionnaire were transcribed and translated from Thai to English by an assistant who was a Thai native speaker and had a good level of English proficiency. The responses were synthesized and analyzed thematically.

Table 3. *Data Analysis*

Qs	Tools	Data	Data Analysis
1. What indicators of SP can be observed during the exchange of text messages by 3 rd year undergraduate students?	A table with screenshots of text messages from Facebook Messenger Group Chat	Text Messages	Counting quantitatively the indicators observed based on Rourke's et al (1999) SP Indicators

2. What are the students' perceptions on SP in online English language learning?	Social Presence Questionnaire with open-ended questions	Score (mean and standard deviation) of the five-point Likert Scale Responses from open-ended questions	Descriptive analysis The transcriptions were transcribed and thematically analyzed.
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3.7 Ethical issues

In order to conduct this research responsibly and with respect, the researcher followed appropriate guidelines on relevant ethical processes. Since this study involves human subjects (Thai students) without any kind of experimental manipulation, the researcher applied for approval from the Research Ethics Review of Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University through a research proposal and achieved the institutional approval on 31 January 2019, No. 2019 PSU-St-QI 015. See Appendix C.

Next, the researcher also wrote a letter of request to access the research site, containing the process of the research both in English and Thai to the Dean of Faculty of Science and Technology before conducting the study. The approval was granted.

Lastly, a written consent form was distributed to the participants, containing the information about the purpose of the study and procedure. The learners were informed that this study could be participated voluntarily. All participants returned with all consent forms and agreed to participate in the project voluntarily. Moreover, this study would not affect their English grades, and all their personal information would be treated confidentially.

3.8 Conclusion

In this chapter, the participants, instruments and tasks were described in considerable detail. Thereafter, research design, data collection and analysis procedures were explained according to the research questions. In the following chapter, the

findings of the data analysis are presented with figures and tables, and thoroughly discussed.

4. RESULTS AND DISCUSSION

There are two research questions in this study. These questions are related to SP categories and indicators observed in text-based CMC during the online exchange messages in Facebook Messenger Group Chat as well as the learners' perception in terms of SP. In the following sections, the results and findings are reported with figures and tables and discussed. These sections are structured in accordance with the research questions.

4.1 Results to RQ1

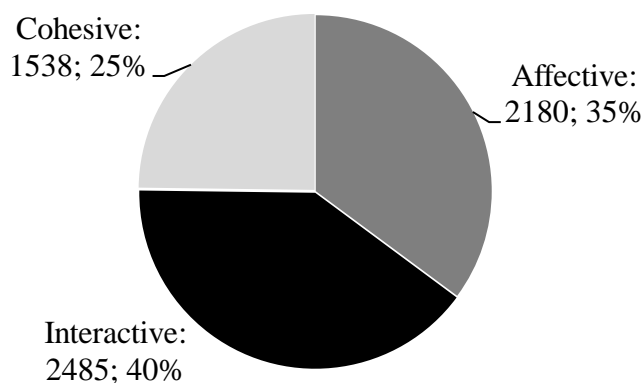
The goal of RQ1 (What indicators of SP can be observed during the exchange of text messages in Facebook Messenger Group Chat by Thai EFL 3rd year undergraduate students?) was to identify the indicators of SP when the learners' exchanged text messages in a CMC environment. The results were presented as followed.

4.1.1 Social Presence Categories

Figure 2 displays the percentage distribution of SP categories, illustrating the responses done by the learners as a whole. Of the three main categories of SP, the majority of the indicators observed were from "Interactive" category with 40%, followed by "Affective" category with 35%, and "Cohesive" category was the least with 25%.

This result indicated that the most frequently used indicators obtained from the text messages were from "Interactive" category, whereas the indicators from "Cohesive" category were the least used. In a glance, the gap of percentages is noticeable; however, there was no dominating category because the differences among the three categories were minor.

Furthermore, as the chart shows the overview of the SP categories, each of the indicators that were employed by the learners for each category is also considered to be illustrated.

Figure 2 *Percentage Distribution of Social Presence Category*

4.1.2 Interactive responses

Table 4 shows that under “Interactive” category, 61% of the responses were “acknowledgement” (i.e., referring directly to the contents of others' messages; quoting from others' messages) indicator as the top indicator. Second was “continuing thread” (i.e., using reply feature of software rather than starting a new thread) with 16%, while “asking questions” (i.e., asking questions to learners or moderator or otherwise inviting response) came third with 11%.

The least used indicators were “approval” (i.e., expressing approval, offering praise, encouragement, complimenting, appreciation) indicator with 6%, “agreement/disagreement” (i.e., expressing agreement or disagreement with others' messages) indicator with 5% and “personal advice” (i.e., offering specific advice to classmates) indicator with 1%.

Table 4. *Frequency of Social Presence Indicators in Interactive Category*

Category & Indicators	Frequency	Percentage
Acknowledgement (AK)	1,525	61%
Continuing Thread (CT)	405	16%
Asking Questions (AQ)	273	11%
Approval (AP)	146	6%
Agreement/Disagreement (AG)	112	5%
Personal Advice (PA)	24	1%

Total Interactive Responses	2,485	40%
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4.1.3 Affective responses

In Table 5, 54% of the “Affective” responses were “paralanguage” (i.e., emoticons, exaggerated punctuation or spelling) indicator as the top indicator. “Self-disclosure” (i.e., sharing personal information, expressing vulnerability) indicator came next with 30%. Then, it was followed by “value” (i.e., expressing personal values, beliefs & attitudes) indicator with 9%. “Humor” (i.e., use of humor -- teasing cajoling, irony, sarcasm, understatement) indicator was used second to the least with 4%. And the least used indicator was “emotion” (i.e., use of descriptive words that indicate feelings) indicator with 3%.

Table 5. *Frequency of Social Presence Indicators in Affective Category*

Category & Indicators	Frequency	Percentage
Paralanguage (PL)	1,183	54%
Self-disclosure (SD)	662	30%
Value (VL)	194	9%
Humor (H)	80	4%
Emotion (EM)	61	3%
Total Affective Responses	2,180	35%

4.1.4 Cohesive responses

Lastly, in “Cohesive” category, shown in Table 6, the most frequently used indicator was “greetings & salutations” (i.e., communication that serves purely social function; greetings, closure) with 44%. “Vocatives” (i.e., addressing classmates by name) was the second most frequently used indicator with 30%, while 20% of the responses were “social sharing” (i.e., sharing information unrelated to the course/topic) indicator. Next to the least used was “group reference” (i.e., referring to the group as “we,” “us,” “our”) indicator with 6%, whereas “course reflection” (i.e., reflection on the

course itself) indicator was never used in the online thread based on the coding conducted.

Table 6. *Frequency of Social Presence Indicators in Cohesive Category*

Category & Indicators	Frequency	Percentage
Greetings & Salutations (GS)	677	44%
Vocatives (V)	469	30%
Social Sharing (SS)	304	20%
Group Reference (GR)	88	6%
Course Reflection (RF)	0	0%
Total Cohesive Response	1,538	25%

Concisely, Table 7 illustrates the SP indicators, ranking from the highest to the lowest ones. The coding analysis and frequency count revealed the most and least indicators in all of the threads.

4.1.5 Summary of the observed Social Presence indicators

The frequency count found 6,203 codes as the total number of indicator occurrences. The top most frequently observed was “acknowledgement” indicator with 1,525 instances out of all sixteen indicators of SP. This indicated that learners would likely recognize and refer to another’s messages. On the other hand, the least used indicator was “personal advice” with 24 instances. There were only few situations when learners would offer advice. Finally, the “course reflection” indicator was not found during the coding process of the text messages; it was never used by the learners.

Table 7. *Social Presence Indicators Ranking from Highest to Lowest Frequency*

Social Presence Indicators	Frequency	Percentage
Acknowledgement (AK)	1,525	25%
Paralanguage (PL)	1,183	19%
Greetings & Salutations (GS)	677	11%
Self-disclosure (SD)	662	11%

Vocatives (V)	469	8%
Continuing Thread (CT)	405	7%
Social Sharing (SS)	304	5%
Asking Questions (AQ)	273	4%
Value (VL)	194	3%
Approval (AP)	146	2%
Agreement/Disagreement (AG)	112	2%
Group Reference (GR)	88	1%
Humor (H)	80	1%
Emotion (EM)	61	1%
Personal Advice (PA)	24	0%
Course Reflection (RF)	0	0%
Total	6,203	100%

4.2 Results to RQ2

The goal of this study was to investigate students' perceptions of SP in CMC environment. In order to answer RQ2 (What are Thai EFL 3rd year undergraduate students' perceptions regarding SP in text-based interaction?), the data were collected from two sources: survey questionnaire for quantitative data along with open-ended questions for qualitative data.

The questionnaire offered quantitative data. The responses from the survey questionnaire with the 5 Likert scale items from 1 (Strongly Disagree) to 5 (Strongly Agree). The data from this part were collected and analyzed through descriptive analysis to find the mean and standard deviation.

4.2.2 Students' Perception: Quantitative Results

After the exchange of messages in a CMC environment, learners were asked to fill out a survey questionnaire. Among 52 learners who participated in the exchange of messages, 45 learners (87%) responded, and the SP Survey Questionnaire revealed that overall, shown in Table 8, most of the respondents expressed their agreements ($M = 4.17$, $SD = 3.94$) according to the score range of agreement levels in Table 2 on each of the items for each of the three categories, namely, "affective", "interactive" and

“cohesive”. In order to delve into detail, each item in each category is presented respectively.

Table 8. *Mean and Standard Deviation of Each SP category (n = 45)*

Category	Mean	SD	Agreement Level
Cohesive	4.29	.400	Strongly Agree
Affective	4.16	.467	Agree
Interactive	4.07	.432	Agree
Total	4.17	.394	

Table 8 displays mean and standard deviation of “cohesive” category. It was found that “cohesive” category had the highest total mean score ($M = 4.29$, $SD = .400$). It indicates that most learners strongly agreed that they behaved in mediated communication based on the indicators in cohesive category. Shown in Table 9, the highest mean score is Item 2.3.4 ($M = 4.57$, $SD = .501$). It shows that most learners used vocative expressions. On the other hand, the least scoring indicator is Item 2.3.1 ($M = 4.09$, $SD = .668$) which refers to building relationship in a group. Although it was the least scoring, it was evident that learners agreed that establishing links with one another was possible in a text-based communication.

Table 9. *Mean and Standard Deviation of Cohesive Category (n = 45)*

Item	Mean	SD	Agreement Level
2.3.4 I would address my classmates by name.	4.57	.501	Strongly Agree
2.3.2 When I saw posts from the teacher in the text-based interaction, I felt close to the teacher.	4.40	.539	Strongly Agree
2.3.3 I would share information unrelated to the course.	4.11	.647	Agree
2.3.1 The text-based interaction enabled me to form a sense of community with other course mates.	4.09	.668	Agree
Total	4.29	.400	

The second highest total mean score is “affective” category ($M = 4.16$, $SD = .467$) presented in Table 10. Based on score range of agreement levels in Table 2, learners strongly agreed that they interacted based on “affective” category. Item 2.1.4 got the highest mean score ($M = 4.38$, $SD = .650$) while Item 2.1.5 got the least ($M = 3.89$, $SD = .726$). This revealed that learners believed that they applied humor when conversing to their classmates, but they also agreed that they participated in the Group Chat Activity when the virtual conversation appeared emotional.

Table 10. *Mean and Standard Deviation of Affective Category (n = 45)*

Item		Mean	SD	Agreement Level
2.1.4	I was able to use humor with my classmates.	4.38	.650	Strongly Agree
2.1.1	The text-based interaction enabled me to express my feelings through emoticons, emojis and punctuations.	4.33	.522	Strongly Agree
2.1.3	I felt comfortable sharing my personal values, beliefs & attitudes.	4.14	.594	Agree
2.1.2	I felt comfortable sharing my personal information.	4.07	.580	Agree
2.1.5	When I saw an emotional discussion in the text-based interaction, I would participate.	3.89	.714	Agree
Total		4.16	.467	

The “interactive” category had the least total mean score ($M = 4.01$), shown in Table 11. The highest mean score in this category was Item 2.2.4 ($M = 4.27$, $SD = .580$). The least scoring mean was Item 2.2.2 ($M = 3.89$, $SD = .647$). The findings showed that the learners were most likely to try to acknowledge their classmates’ messages online, but they were less likely to answer when they saw questions in the Group Chat.

Table 11. *Mean and Standard Deviation of Interactive Category (n = 45)*

Item		Mean	SD	Agreement Level
2.2.4	I would try to directly acknowledge the response of each of my classmate.	4.27	.580	Strongly Agree

2.2.6	I would try to express praise and encourage my classmates.	4.20	.588	Strongly Agree
2.2.1	I felt comfortable asking questions in the text-based interaction if I didn't understand a point in the course learning.	4.04	.673	Agree
2.2.5	My classmates were able to acknowledge my responses.	4.04	.673	Agree
2.2.3	In the text-based interaction, I would try to ask the teacher questions.	3.98	.583	Agree
2.2.2	When I saw a question raised in the text-based interaction, I would answer it.	3.89	.647	Agree
Total		4.07	.432	

4.2.3 Perceived English Language Learning

It is apparent in Table 12 that most of the learners strongly agreed that they derived language learning from the online text-based interaction with the use of the English language ($M = 4.55$, $SD = .460$) according to Table 2. Furthermore, most of the respondents considered the usefulness of taking part in an online Group Chat ($M = 4.64$, $SD = .484$).

Table 12. Mean and Standard Deviation of Perceived English Language Learning ($n = 45$)

Item	Mean	SD	Agreement Level	
2.4.3	Participating in the online Group Chat was a useful experience.	4.64	.484	Strongly Agree
2.4.2	The text-based interaction enabled me to practice my English skills.	4.58	.499	Strongly Agree
2.4.4	I felt I learned a lot from activities with the text-based interaction.	4.49	.626	Strongly Agree

2.4.1	I felt that participation in the text-based Group Chat encouraged me to learn English.	4.49	.589	Strongly Agree
	Total	4.55	.460	

At the end of the descriptive analysis, it was found that overall, learners conceded to behave according to SP indicators. Mostly, learners behaved based on cohesive indicators. In a CMC environment such as Facebook Messenger Group Chat, they considered to address their interlocutors' names to feel the sense of belongingness; to use humor and emotional discussions were only adequately participated; lastly, to acknowledge their classmates' messages but less inclined to become involved when questions were raised. Finally, in terms of perceived language learning, the learners highly regarded the benefits of the online interaction on their language learning.

4.2.4 Student Perception of SP: Qualitative Findings

This section contains the qualitative analysis (through thematic analysis) of the data gathered from the responses in the open-ended questions which was included in the Social Presence Survey Questionnaire. Codes were assigned in order to look for patterns and establish themes.

Three themes emerged: building group cohesion, immediacy and English interaction opportunity.

4.2.4.1 Building Group Cohesion

Participants indicated that when they interacted in Facebook Messenger group chat, they were able to establish rapport with each other and with the teacher. Some comments are shown, as follows:

"I can build a relationship with my lecturer and my friends through Facebook messenger."

Student 1*. (2020, March 6). Open-ended Questions

Also, as indicated by one student, with shared experiences, they formed closer bonds with one another:

“I’m grateful to have a conversation with friends and I’m familiar with friends because we share our daily life on Chat Group.”

Student 17*. (2020, March 6). Open-ended Questions

Furthermore, other learners also noted that they became more socially involved with their shy classmates during the exchange of messages online than in classroom. A student commented:

“I can get to know a new friend, some of them I rarely to talk to. It’s a good chance to exchange our new experience.”

Student 21*. (2020, March 6). Open-ended Questions

Interestingly, a sense of belongingness was expressed as one student commented:

“I feel that I’m a part of Chat Group. I can get to know more about my friends’ ideas.”

Student 45*. (2020, March 6). Open-ended Questions

However, there was a suggestion about the liberty to select group members. A comment illustrated that having close friends in the group may lead to more engagement. Talking about this issue, a student mentioned:

“A lecturer should let us choose our member group by ourselves. It would be more Chat Group interaction if we’re close friends.”

Student 14*. (2020, March 6). Open-ended Questions

4.2.4.2 Immediacy

The learners’ positive perceptions of their involvement in the activity also led to express their concerns regarding the difficulty of accurate meaning online due to the lack of nonverbal cues. In one case, a student mentioned:

“I have more confident to reply the message faster although I can't see my friends' faces.”

Student 19*. (2020, March 6). Open-ended Questions

Commenting on communicating in English in the online interaction environment, one of the learners commented:

“It's the easy way to communicate but I will not know my friends' feeling through this chat then it will make me misunderstand their true feeling.”

Student 2*. (2020, March 6). Open-ended Questions

“There should have pictures while chatting, it should be more fun and exciting.”
And another commented, *“I want a video on Facebook messenger.”*

Student 13*. (2020, March 6). Open-ended Questions

4.2.4.3 Opportunity for English Interaction

When the participants were asked on their feelings about communicating in English in an online environment, a range of positive responses was elicited. They said that with their participation in the Facebook Messenger group chat, it boosted their confidence and gained more exposure to English language. As indicated by one student, their urge to reply in English developed the participants' confidence:

“It makes me brave by using English word although it's right or wrong.”

Student 10*. (2020, March 6). Open-ended Questions

It was indicated that the activity increased their exposure to English. As one student put it:

“I have less opportunity to use English in a daily life because I don't have friends that speak English to me. I'm thankful to this subject that I can close to English.”

Student 29* (2020, March 6). Open-ended Questions

As a result, some felt that their involvement in online interaction provided them the opportunity to learn English. One student commented about finding out new vocabulary, and led them to convey their messages to the group:

“I can learn more about how to use English because a lecturer has given a topic that I have to find out a new vocabulary. Then I can reply by using a sentence or giving my opinion.”

Student 3*. (2020, March 6). Open-ended Questions

To sum up, the three themes (building cohesion, immediacy and opportunity for interaction) that emerged from the qualitative data were highlighted as these views are closely related to aspects of online SP. In the following section, the findings of the analysis are discussed.

4.3 Discussion

This study investigated how SP was manifested in a computer-mediated communication environment through using Facebook Group Chat. The empirical research component of this study encompassed phases that were detailed in the previous methodology chapter. This chapter outlines the findings and discussions of the investigations of SP in a CMC environment.

4.3.1 RQ1: What indicators of SP can be observed during the exchange of text messages in Facebook Messenger Group Chat by Thai EFL 3rd year undergraduate students?

At the end of the analysis, it was found that the indicators presented by Rourke et al (1999) and Swan and Shih (2005) were observed in the data. However, the course reflection category was not observed.

The Thai EFL learners in this study remarkably seemed to act in accordance with Interactive category more than Affective and Cohesive categories. It may be explained that Interactive responses refer to the interaction that “build and sustain relationships, express willingness to maintain and prolong contact, tacitly indicate personal support” (Rourke et al., 1999, p. 58). It is without a doubt that the learners were exerting effort to take part and respond in the thread as much as they could.

The results demonstrated the top three indicators of SP (acknowledgement; paralanguage; and greetings and salutations). Incredibly, the most commonly used SP indicators belonged to the three distinct categories. Yamada (2009) affirms that SP is a criterion of successful online learning. Similar to Akayoğlu (2011), it might be concluded that all categories are important in order to create a fruitful learning environment for learners. Importantly, it supports the idea SP influences the value of online communication flow (Devi, Amir, & Krish, 2017). This can help language learners to demonstrate their involvement in CMC environments.

In this study, the most frequently observed indicator was acknowledgement indicator which belongs to Interactive category. This result is similar to that of Lowenthal's (2009) study when he also counted the SP indicators in the threaded discussions. According to Rourke et al. (1999), *referring explicitly to the contents of another's message* is one of the suitable indicators of interaction. In fact, this indicator was the reason for the increase of the interactive responses in this study. Certainly, in order for the interaction to happen, it requires that participants post replies. For example, in a week wherein they were asked to "talk" about health, they reacted and/or provided feedback. This is in line with Swan and Shih's (2005) study that learners consider and draw on their peer's responses. As Lomicka and Lord's (2007) study of SP in virtual communities, the interpersonal interaction (Saville-Troike & Barto, 2017) is strengthened by the exchange of messages that enables learners to enthusiastically partake on the Internet. Therefore, the participants in this study appreciated CMC when their interlocutors recognized the messages. While it was expected that students would engage in an online conversation with each other more, more of their responses were built upon their responses to the teacher-researcher. As Knutson (2018) suggest that teachers can rely on scaffolding strategies, such as the use of introductory sentences, prompts, and non-verbal replies. Hence, the possible high frequency of acknowledgement indicator is the teacher presence (Garrison, 2016).

The second most frequently observed indicator was paralanguage indicator. Learners took advantage of text-based features in order to express how they felt, and to compensate for the limited communication process of CMC. This result agrees with Swan's (2003) content analysis of asynchronous discussions in an online graduate course in education wherein the most frequently employed indicator was paralanguage.

According to Avery's (2017) literature study, ESL learners who depend on physical cues due to being less proficient in English tend to use emoticons. This may also be true to Thai learners in this study. For that reason, Luangrath, Peck and Barger (2017) points out that the utilization of emoticons and emojis is a visual representation in a cyber-text-based communication. Because English is the only language in which text-based communication is used, usage of this indicator predictably occurred during the Group Chat Activity. When it came to getting across their emotions, the participants compensated for the absence of social cues by expressing their feelings using emoticons, stickers, punctuation, and either capitalization or spelling which became learners' digital language. On the other hand, "paralanguage" or the use of emoticons, emojis, stickers or gifs may be deemed casual or "unprofessional" (Dunlap, Bose, Lowenthal, York, Atkinson & Murtagh, 2016), but this is also a factor to develop SP which concerns with affective aspect of CMC (Rourke et al, 1999). Being informal by using these textual representations of the nonverbal behaviors and cues can be overlooked because the learners in this study were already familiar with each other as well as they were instructed to behave as if they were in an actual chatting situation.

The third most frequently observed was the greetings and salutations indicator which belongs to Cohesive Category. Generally, the beginning and the end of the thread had greetings as well as the use of conversational phrases. This result is akin to Lowenthal's (2012) study which also came third. This behavior could be attributed as a way to show inclusivity, and to set the tone of the thread and/or share non-essential information. According to Lomicka and Lord (2007), greetings, phatic and salutations function to develop strong bonds of the group.

As for the least frequently prevalent indicators, the emotion and personal advice indicators were found respectively. The functions of emotion indicator could be reasonably interpreted since the communication was conveyed via communication medium. Due to the nature of text-based mode, it was unnecessary to describe their feelings in words. Moreover, personal advice is an indicator of interactive category which was also the least frequently used, the mere use of the word "personal" connotes intimacy. In addition, investigating SP patterns of three groups of foreign language teachers in USA, Lomicka et al. (2007) found out that giving personal advice was also used the least. It is because personal advice indicator emerged depending on whether it

was by pair or by group. They added that with group setup, the online discussion became more public; hence, the level of intimacy is retrained. The result of these two indicators may be also explained due to the limited proficiency of the participants. According to Tu (2002), it becomes challenging for language learners to express themselves effectively in situations where the communication lacks physical cues.

Interestingly, course reflection indicator was not observed which indicates that it was not used by the learners in this study. An emergent variable developed through the study of Swan (2003) was removed from the other studies because it did not seem relevant to their coding schemes. Moreover, this study's goal was to allow participants to participate in a virtual chat without knowing they are participating in a formal learning experience. They were asked to be part of a naturally occurring conversation setting. As the learners were not taught, providing insights on the topic or to the course was unnecessary. It is also possible that the discussion thread activity was not linked to the course, in which case grading was not applied and participation was entirely voluntary. It appears that the feelings of learners who were part of this study and those previously studied by Saude et. al., (2012) are related. The formal learning might lead to stress, and exclusion of the activity from the course diminished anxiety. The learners get in the flow of communicating with others, and engaging in natural conversation in the process.

4.3.2 RQ2: What are Thai EFL 3rd year undergraduate students' perceptions of SP in text-based interaction?

It is possible to note the results that the learners demonstrated their “presence” and appreciated the “presence of others” in the group chat. The results of learners' perception of SP in this study matches accordingly with Picciano (2002). In his study of the relationship of learners' perception of SP to their performance on written assignments, learners were able to socialize in a CMC environment.

The learners discerned that they chose to use vocative expressions. Hughes, Ventura, and Dando (2007) point out that addressing names is constant in a conversation in order to be acknowledged in a group especially with four to five members. Additionally, it is evident that establishing links with one another influence the sense of being part of a group.

The results also revealed that while learners tended to apply humor when conversing to their classmates, they would also less participate in the Group Chat when the virtual conversation appeared emotional. Aragon (2003) points out that sharing humor indicates changing the course of conversation from formal to informal. However, a point worth taking is that since the group had already established bond with one another, it was unnecessary to be sentimental. This lends support to a previous study done by Akyol & Garrison (2008).

Finally, learners felt that they would most likely try to acknowledge their classmates' messages online but they were less likely to answer when they saw questions in the Group Chat. Gordon (2014) highlights that interactive category happens when messages are referred and replied. Reasonably, the learners in this study replied to demonstrate exchanges of ideas. However, consistent to Ke (2010), learners would disregard questions. She explains that one-way interaction usually occurs with the members online due to different levels of experience as supposed to have two-way interaction.

However, the highest mean and standard deviation from each category did not suggest a successful or more meaningful interaction and exchange of learning of the foreign language. Most of the perceived responses showed in Facebook Messenger Group Chat for Thai learners in EFL would not create a greater impact on learning the language but would most likely create an environment to share belongingness as said to be part of the group which corresponds with the results in Saude, Puteh, Azizan, Hamdan, Shukor and Abdullah's (2012) study. In addition, the mediated communication for Thai learners did not create an interactive environment that allowed them to respond to questions or answer the questions in a manner of conversation in English, but it did not mean that they did not comprehend. Thus, Facebook Messenger Group Chat served more as a tool for casual information rather than creating enhanced communication skills in writing or responding to a text if learners' perception is concerned.

According to the qualitative findings of this study, building group cohesion, immediacy and opportunity for English interaction were the themes that emerged. There are some explanations for this. First, building group accords with Elverici and Karadeniz (2018) as it can also be referred to as getting closer. A possible explanation for this might be due to disclosing their personal experiences that they were to get to know each

other. Although there were positive responds by the learners on connecting with another, it was suggested to have the liberty to select their own group members. Thus, it can be explained that learners would prefer familiarity in order to create and maintain a sense of collective commitment as Rourke et. al (1999) describes cohesive category.

After that, the quality of being immediate was another crucial factor for Thai EFL learners in this study. Kim, Kwon and Cho (2011) point out that immediacy relates to intimacy in which focuses on enhancing nonverbal communication. Therefore, the learners' concerns pose an idea that it can be challenging to depend on text-based interaction alone especially with their limited English proficiency. Furthermore, the learners also mentioned about misinterpretation due to the text-based tool utilized in this study. Again, Kim et. al. (2011) state that learners will have a better experience and be more satisfied if they make full use of the affordances of CMC tools. Hence, the learners suggest the use of video or visual representation. This means that although text-based communication has its advantage, it is also essential to incorporate different modes of online communication for comprehensive language teaching and learning.

A positive common view amongst the learners was that they felt that the virtual interaction provided them a favorable circumstance to increase their use of English online. This finding is similar to Elvirici's (2021) notion that using Facebook offers a social platform for EFL learners as well as providing the possibility for meaningful engagement and learning. Receiving responses via CMC such as Facebook Messenger Group Chat helps participants gain opportunity to be more expose to communicating in English. Similar to Yamada (2009), because of communication, learners can receive and comprehend information, and will in turn use this to reply or contribute to the discussion. Also, the purpose of providing language learning is manifested because SP facilitates non-threatening environment, language inputs and expressions were conveyed in the naturally occurring conversation online.

4.4 Conclusion

According to the research questions, the relevant results and findings were presented in each area of this chapter. In this chapter, the findings were discussed in depth, and compared to those found in other studies in the literature. In the next chapter,

general conclusion of this study is made. In light of the outcomes of this study, suggestions and recommendations are given.

5. CONCLUSION

This last chapter would serve as the overview of the study. The results and findings, practical implications and recommendations briefly summarized the whole thesis.

5.1 Overview of the Study

The purpose of this study was to examine Thai EFL students' SP in computer-mediated communication in a Thai university as well as exploring their perception on the influence of a CMC tool, Facebook Messenger Group Chat, to students' SP.

At the end of the analysis, the flow of the conversation online was determined in terms of SP. The indicators of SP established by Rourke, Anderson, Garrison and Archer (1999) were observed. In addition to the indicators, this study also gains affirmative perception from the participants as they either agree or strongly agree with the behaviors they would manifest in a digital text-based communication. The outcomes of this study might be beneficial for researchers, experts, teachers and learners who are trying to partake in English learning classes in CMC environments.

5.2 Implications for EFL Context

The awareness of SP and enhancing it enables one to determine how learners behave so that rich and meaningful communication can be developed to establish language learning. This is beneficial for online training or English language learning teachers and learners. If language teachers improve their teaching skills with SP category at hand, the learning experience of the learners may progress. Practical knowledge will also support teachers to improve the instructional design of online courses and may also integrate mediated communication to physical classroom setup (Richardson & Swan, 2003). This kind of pedagogical implications may be of importance these day when the pandemic situation has shifted the classroom settings to be online where social media may take part in key roles in bridging the formal and informal learning environments for language learners in the future.

In the context of EFL, it is important to increase the English exposure and supplement additional practice for learners. One example of a possible use of technology

is that educators may employ online resources in their courses or encourage learners to practice their target language in an online environment. Moreover, the indicators found in this study can be considered to provide English language inputs and expressions for learners to use in their English class online setting. Gaining language inputs based on SP can help create a warm and comfortable language learning environment. Thus, teachers and educators may provide useful hints or expressions as language inputs for low proficiency EFL learners so that they could interact with online partners meaningfully as asserted by Yamada (2009).

The awareness of teachers and students of the attributes and features of online environment and its tools should be raised. Through quantitative counting of the SP indicators, it assists in better understanding the flow of conversation online. The language teachers can benefit from the results to gain idea on how to support learning engagement. Teachers can employ the SP in indicators in CMC platforms to enhance meaningful communication while using English. They may, for example, provide some tasks in fostering affective responses if learners need help in building this type of response through collaboration with peers. This could monitor a process of acquiring language as claimed by Saville-Troike & Barto (2017).

Based on this study, it appears that EFL instructional designers can focus on designing materials for activities in or out of class, such as online activities, that provide input and expression opportunities via Facebook. Social media is part of This learners' life. To bridge their learning in and outside of the classroom via using Facebook should be promoted by teachers, educators and policy makers in the Thai education context.

Finally, if the results of this study may be applied to the design and use of CMC platforms such as Facebook Messenger Group Chat, the implications for EFL stakeholders, teachers, and learners could be significant (Elvirici, 2021).

5.3 Limitations and Recommendations for Further Research

The indicators represent the whole SP, thus each indicator should be used to its full potential to improve the quality of interaction and promote engagement among language learners. Furthermore, results from this study show that EFL educators should spend extra attention on creating learning materials for class activities that involve using Facebook and other social networks for language input and expression.

One of the limitations of this study was that only text-based chat was introduced to the learners. Therefore, another study could be designed to the utilization of the other modes of CMC such as voiced-based, video-based or combination. The findings of that study might be compared with the outcomes of this study.

The group chat activity in this study was limited with the use of Facebook Messenger Group Chat. In the future, teachers should explore other available CMC platforms to support different ways of English language learning. Different tools might give different results of interactions among English language learners.

Furthermore, the accuracy of language functions and forms was not the main focus of this study. The online exchanged messages were not analyzed in terms of how learners used the English language when they interacted with content and each other as well as the grammatical structure which received little attention. Therefore, as part of EFL and/or ELT, language functions and forms can be beneficial for future research.

In addition, this study was conducted with tertiary EFL learners. The result of this study may be compared to that of primary or secondary learners. The SP indicators that can be observed may either be similar or different from the outcomes of this study, and may contribute to the body of knowledge in terms of SP in CMC environments.

Finally, informal conversation was implemented in this study. Participants were tasked to communicate in naturally occurring conversation. Further study with more focus on formal learning in a CMC platform is therefore suggested. The inclusion of the group chat activity to the course may affect SP.

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APPENDICES

Appendix A:
Social Presence Questionnaire

แบบสอบถาม

แบบสอบถามนี้จัดทำขึ้นเพื่อใช้ประเมินเครื่องมือในการวิจัยและเก็บรวบรวมข้อมูลเกี่ยวกับความคิดเห็น พฤติกรรมการนำเสนอตัวตนต่อสังคมของนักศึกษาไทยที่เรียนภาษาอังกฤษเป็นภาษาต่างประเทศ ในการใช้ เครือข่ายคอมพิวเตอร์เพื่อการติดต่อสื่อสารคุยผ่านแพลตฟอร์มโซเชียลมีเดียจะถูกรับเป็นความลับไม่มีการเปิดเผยตัวตนของนักศึกษา และขอความร่วมมือในการให้ข้อมูลให้จริงใจ ขอขอบคุณที่ให้ความร่วมมือ

ส่วนที่ 1: ข้อมูลทั่วไป

1.1 เพศ

ชาย หญิง

1.2 อายุ ปี

1.3 ความถี่ที่คุณอ่านหนังสือบนแพลตฟอร์มโซเชียลมีเดียสักกี่ครั้ง

ทุกวัน 4-5 วัน 2-3 วัน 1 วัน

1.4 โดยทั่วไปกิจกรรมที่ใช้ในอินเทอร์เน็ตบนแพลตฟอร์มโซเชียลมีเดีย (เลือกได้มากกว่า 1 ข้อ)

- ปรึกษาการบ้านและ เรื่องทักไป ในโรงเรียนกับเพื่อน
- อธิบายบทเรียนกับเพื่อนและ อาจารย์ให้มีความเข้าใจมากยิ่งขึ้น
- คุยเรื่องทักไปกับเพื่อน
- อื่นๆ (โปรดระบุ) _____

ส่วนที่ 2 : พฤติกรรมและทัศนคติเกี่ยวกับกิจกรรมการคุยผ่านห้องสนทนาเฟสบุ๊คเมสเซนเจอร์

คำชี้แจง: กรณาทอบแบบสอบถาม โดยเลือกคำตอบตามลำดับความสำคัญที่ตรงกับความเห็นของนักศึกษา (1=ไม่เห็นด้วยอย่างยิ่ง, 2=ไม่เห็นด้วย, 3=ไม่แน่ใจ, 4=เห็นด้วย, 5=เห็นด้วยอย่างยิ่ง)

รายการ	ไม่เห็นด้วย อย่างยิ่ง 1	ไม่เห็นด้วย 2	ไม่แน่ใจ 3	เห็นด้วย 4	เห็นด้วยอย่าง ยิ่ง 5
2.1 ด้านอารมณ์					
2.1.1 การคุยผ่านห้องสนทนาในกลุ่มเฟสบุ๊คเมสเซนเจอร์ โดยใช้สติ๊กเกอร์/ไอคอน อักษรภาพ และ เครื่องหมายวรรคตอนอื่นๆ สามารถสะท้อนความรู้สึกของนักศึกษาได้ดี					
2.1.2 นักศึกษารู้สึกสบายใจ/ไม่อึดอัด ที่แชร์ข้อมูลส่วนตัวผ่านห้องสนทนาในกลุ่ม					
2.1.3 นักศึกษารู้สึกสบายใจ/ไม่อึดอัด ที่ถ่ายทอดค่านิยม ความเชื่อและทัศนคติของนักศึกษาผ่านห้องสนทนาในกลุ่ม					
2.1.4 นักศึกษาสามารถมีอารมณ์ขัน/เล่าเรื่องตลกๆ กับเพื่อนร่วมห้องผ่านห้องสนทนาในกลุ่ม					
2.1.5 เมื่อนักศึกษาเห็นบทสนทนาที่อ่อนไหวที่แสดงอารมณ์ในการคุยผ่านห้องสนทนาในกลุ่ม นักศึกษารู้สึกอยากเข้าร่วมคุยด้วย					
2.2 ด้านปฏิสัมพันธ์					
2.2.1 นักศึกษารู้สึกสบายใจ/ไม่อึดอัด ที่จะโพสต์คำถามผ่านห้องสนทนาในกลุ่ม ถ้านักศึกษารู้สึกไม่เข้าใจในเนื้อหารายวิชา					
2.2.2 เมื่อนักศึกษาเห็นคำถามผ่านห้องสนทนาในกลุ่ม นักศึกษาจะเข้าไปตอบ					
2.2.3 นักศึกษาพยายามถามอาจารย์ในการคุยผ่านห้องสนทนาในกลุ่ม					
2.2.4 นักศึกษาพยายามยอมรับในคำตอบของเพื่อนร่วมห้องแต่ละคน ผ่านห้องสนทนาในกลุ่ม					
2.2.5 นักศึกษารู้สึกว่า เพื่อนร่วมห้องยอมรับในคำตอบของนักศึกษา ในห้องสนทนาในกลุ่ม					
2.2.6 นักศึกษาพยายามแสดงออกถึงความชื่นชมและให้กำลังใจแก่เพื่อนร่วมห้องผ่านห้องสนทนาในกลุ่ม					

รายการ	ไม่เห็นด้วย อย่างยิ่ง 1	ไม่เห็นด้วย 2	ไม่แน่ใจ 3	เห็นด้วย 4	เห็นด้วยอย่าง ยิ่ง 5
2.3 ด้านสังคม					
2.3.1 การคุยผ่านห้องสนทนาในกลุ่มเฟสบุ๊กเมจเซนเจอร์ สามารถทำให้นักศึกษาสร้างความรู้สึกลมเกลียวกับเพื่อนร่วมห้อง					
2.3.2 เมื่อนักศึกษาเห็นข้อความจากอาจารย์ในการคุยผ่านห้องสนทนาในกลุ่ม นักศึกษารู้สึกใกล้ชิดกับอาจารย์					
2.3.3 นักศึกษาอยากจะแชร์ข้อมูลที่ไม่เกี่ยวข้องกับการเรียน ผ่านห้องสนทนาในกลุ่ม					
2.3.4 นักศึกษาใช้ชื่อเล่นกับเพื่อนร่วม เวลาแชนกัน ห้องผ่านห้องสนทนาในกลุ่ม					
2.4 ด้านการรับรู้ทางภาษาในการเรียนผ่านทางออนไลน์					
2.4.1 นักศึกษารู้สึกว่าการเข้าร่วมการคุยผ่านห้องสนทนาในกลุ่มเฟสบุ๊กเมจเซนเจอร์ กระตุ้นนักศึกษาในการเรียนรู้ภาษาอังกฤษ					
2.4.2 การคุยผ่านห้องสนทนาในกลุ่ม สามารถช่วยนักศึกษาในการฝึกทักษะภาษาอังกฤษของนักศึกษา					
2.4.3 การเข้าร่วมในการคุยผ่านห้องสนทนาในกลุ่ม ถือเป็นประสบการณ์ที่มีประโยชน์					
2.4.4 นักศึกษารู้สึกว่านักศึกษาได้เรียนรู้จากกิจกรรมที่มากมายในการคุยผ่านห้องสนทนาในกลุ่ม					

ส่วนที่ 3 : คำถามปลายเปิด

3.1 นักศึกษารู้สึกอย่างไรเกี่ยวกับการเข้าร่วมกิจกรรมคุยสื่อสารภาษาอังกฤษผ่านห้องสนทนาในกลุ่มเฟสบุ๊กเมจเซนเจอร์

3.2 นักศึกษารู้สึกอย่างไร เมื่อมีการโต้ตอบกับเพื่อนนักศึกษาคนอื่นๆ ในการคุยห้องสนทนาผ่านเฟสบุ๊กเมสเซนเจอร์

3.3 ความคิดเห็น/ข้อเสนอแนะอื่นๆ เกี่ยวกับประสบการณ์กิจกรรมผ่านห้องสนทนาในกลุ่มเฟสบุ๊กเมจเซนเจอร์

ขอขอบคุณ

Social Presence Survey Questionnaire

Thank you for sparing some time to fill this form for me. This is a form to search for information on how to use the text-based chat room. If you fill in the form, it means that you agree to allow the information you have provided to be used for research purposes. All the information is kept anonymously with the hope to encourage you to reveal your true thoughts.

Part 1: Basic Information

1.1 Gender

Male Female

1.2 Age years old

1.3 How often do you use the text-based Group Chat of Facebook Messenger?

everyday 4-5 times 2-3 times. 1 time

1.4 What do you do with the text-based Group Chat of Facebook Messenger?

discuss homework and school stuff with peers

clarify lesson with peers and teachers

talk about anything with peers

If other, please specify _____

Part 2: Social Presence

DIRECTIONS: Please indicate if you Agree/Disagree with each statement as it relates to your online class discussion (1=strongly disagree, 2=disagree, 3=uncertain, 4=agree, 5=strongly agree)

Items	Strongly disagree 1	Disagree 2	Uncertain 3	Agree 4	Strongly Agree 5
2.1 AFFECTIVE					
2.1.1 The text-based interaction enabled me to express my feelings through emoticons, emojis and punctuations.					
2.1.2 I felt comfortable sharing my personal information.					
2.1.3 I felt comfortable sharing my personal values, beliefs and attitudes.					
2.1.4 I was able to use humor with my classmates.					
2.1.5 When I saw an emotional discussion in the text-based interaction, I would participate.					
2.2 INTERACTIVE					
2.2.1 I felt comfortable asking questions in the text-based interaction if I didn't understand a point in the course learning.					
2.2.2 When I saw a question raised in the text-based interaction, I would answer it.					
2.2.3 In the text-based interaction, I would try to ask the teacher questions.					
2.2.4 I would try to directly acknowledge the response of each of my classmate.					

2.2.5 My classmates were able to acknowledge my responses.					
2.2.6 I would try to express praise and encourage my classmates.					
2.3 COHESIVE					
2.3.1 The text-based interaction enabled me to form a sense of community with other course mates.					
2.3.2 When I saw posts from the teacher in the text-based interaction, I felt close to the teacher.					
2.3.3 I would share information unrelated to the course.					
2.3.4 I would address my classmates by name.					
2.4 PERCEIVED LANGUAGE LEARNING FROM ONLINE DISCUSSION					
2.4.1 felt that participation in the text-based Group Chat encouraged me to learn English.					
2.4.2 The text-based interaction enabled me to practice my English skills.					
2.4.3 Participating in the online Group Chat was a useful experience.					
2.4.4 I felt I learned a lot from activities with the text-based interaction.					

Part 3: Open Questions

DIRECTIONS: Kindly answer the questions as they relate to you.

3.1 How did you feel about being asked to communicate in English in the online interaction environment?

3.2 How did you feel when you interacted with other students on Facebook Messenger?

3.3 Do you have any other comments about the activities you experience online?

-END-

Appendix B:
Topics for Facebook Messenger Group Chat Interaction

Topics for Facebook Messenger Group Chat Interaction

Week	Topic
1	“Practice Week”
2	Making Friends
3	Hobbies and Interests
4	Health
5	Celebrations
6	Around Town
7	At Home
8	Music / Song

Appendix C:
Certificate of Approval of Human Research Ethics



Certificate of Approval of Human Research Ethics
Center for Social and Behavioral Sciences Institutional Review Board,
Prince of Songkla University

Document Number: 2019 PSU - St - QI 015

Research Title: A Study of Thai EFL Students' Social Presence in Computer-mediated Communication

Research Code: PSU IRB 2019 - PSU - St 012

Principal Investigator: Miss Rizza Ann Cruz

Workplace: Master of Arts Program in Teaching English as an International Language,
Faculty of Liberal Arts, Prince of Songkla University

Approved Document: 1. Human Subjects
2. Instrument
3. Invitation and Informed Consent

Approved Date: 31 January 2020

Expiration Date: 31 January 2022

This is to certify that the Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University has approved for Ethics of this research in accordance with Declaration of Belmont.

Sasitorn Phumdoung

(Professor Dr. Sasitorn Phumdoung)
Committee Chairman of Center for Social and Behavioral
Institutional Review Board, Prince of Songkla University



**Appendix D:
Full Proceeding**

Paralanguage Use in EFL Students' Text-Based Communication in Facebook Group Chat: Empirical Evidence from Social Presence Approach

Abstract

Researchers and educators have examined social presence in an online learning space to boost students' collaborative interaction. However, evidence of paralanguage, one of the elements in measuring Social Presence, is not clear to suggest how EFL students used paralanguage to collaboratively build an affective learning community. The aim of this mixed method case study of 52 Thai university students was to investigate how social presence is established by using paralanguage in Facebook group chats as text-based communication. Facebook group chat messages from 11 groups for seven weeks and students' responses to a five-point Likert scale questionnaire ended with open-ended questions were coded and analyzed via the framework of social presence approach. The results showed that social presence was established using paralanguage by Thai EFL students extensively. Emoticons, exaggerated punctuation, and spelling were the top indicators of paralanguage, suggesting that the students employed these non-verbal cues as key elements to effectively develop and maintain social presence outside of the classroom activities and this improved their language learning to alleviate anxiety. Pedagogical implications are discussed to foster collaborative communication in English among EFL students.

Keywords: social presence, paralanguage, EFL students, Facebook group chat, text-based communication

Introduction

Social Presence (SP) is believed to affect online engagement between students since it defines how they connect and communicate. According to Elverici and Karadeniz (2018), it can enhance communication amongst students. Discovering the SP through social media, the authors found that an enhanced SP helps improve the learning environment for second language learners who are connected online. Ubon and Kimble (2003) assert that SP facilitates increased social contact, learning satisfaction, in-depth conversations, and collaborative learning. Hence, SP can enhance EFL learning in fostering greater participation and engagement. For example, computer-mediated communication (CMC) can help EFL learners practice conversation and connect with the help of SP (Hedge, 2000).

According to the SP approach, the three key categories of SP include interactive, cohesive, and affective factors. These categories are used to measure SP learners' responses (Swan & Shih, 2005). First, affective responses or the emotional category deal with emotion, humor, paralinguage, and self-disclosure. Then, cohesive responses are viewed to promote group-building relationship, which is related to greetings, group references, social sharing, and vocatives, which refers to addressing a participant by name. Lastly, interactive responses denote interchanges between interlocutors which pertains to acknowledgement, agreement and disagreement and inquiry (Swan & Shih, 2005; Rourke et al., 1999).

Textual paralinguage (TPL), one of the subcategories of affective responses, is written manifestations of nonverbal audible, tactile, and visual elements that supplement or replace written language and that can be expressed through words, symbols, images, punctuation, demarcations, or any combination of these elements (Luangrath et al., 2017, p. 98). Despite the paucity of nonverbal information available in text-based CMC, it is argued that paralinguage is an element in the affective factors that help understand how learners build their community in text-based communication.

A question still remains unclear as to how EFL students who lack English communication outside of the classroom build such an affective community through paralinguage use, especially in Facebook group chat as a CMC learning environment. Such an understanding of the use will help facilitate them and foster greater participation for pedagogical purposes.

Objectives/Research Questions

While SP helps determine how learners engage online and is recommended for creating a rich and relevant CMC learning environment, paralinguage, one of the indicators of Social Presence may be advantageous for EFL students. The purpose of this article was to investigate how social presence is established through the use of paralinguage in Facebook group chats as text-based communication. This article is driven by this question: What role does paralinguage play in creating a social presence in text-based communication like Facebook group chats?

Social Presence and Its Value in Language Learning

It is believed that SP is the capacity for members to introduce and bring out their personalities in a community to have their existence acknowledged, especially in an online setting (Yamada, 2009). Online asynchronous dialogues gave students the opportunity to express themselves and make connections with others through the medium of text alone (Garrison & Anderson, 1999, as cited in Devi et al., 2017). According to Rourke et al. (1999), online students can make themselves seem more "real" and more likely to interact with others by employing emoticons, anecdotes, and humor when interacting in digital environments. In this article, SP is defined as the capacity to represent one's identity and to recognize the value in others in order to foster a supportive community based on shared interests and values, especially online. When students have a safe space where they can openly share and receive feedback from their peers, the online classroom takes on a life of its own. This would increase comfortability in online learning (Kear, 2010).

According to relevant literature about SP (Swan & Shih, 2005; Rourke et al., 1999), it entails three kinds of categories. First, affective responses or emotional category deal with emotion, humor, paralinguage, and self-disclosure. Another type is cohesive responses which are viewed to promote group-building relationship, which is related to greetings, group references, social sharing, and vocatives, which refers to addressing a participant by name. Lastly, interactive responses denote interchanges between interlocutors which pertains to acknowledgement, agreement and disagreement and inquiry (Swan & Shih, 2005; Rourke et al., 1999).

Regarding the linguistic aspect, SP affects the accuracy and fluency of learners when communicating in CMC environment. Yamada (2009) discovered that learners become more aware with their grammar accuracy than in videoconferencing. It is because learners can be given ample time to reflect on language structure. Lee (2002) pointed out that communicators can check their messages first before sending their messages. On the other hand, while voice communication enables learners to speak naturally, videoconferencing allows learners to express themselves more through verbal/social/nonverbal cues that facilitate the accuracy of their intended during conversation (Lee, 2002). As Avery (2017) asserted, EFL learners with low proficiency tend to use emoticons in online discussion to increase fluency in communication.

Paralinguage as an Indicator of SP

According to Rourke et al. (1999), affective category refers to the manifestation of emotion, feelings, and mood. One of the key indicators of Affective category is paralinguage. It refers to text features to express emotion (i.e., emoticons/emojis, exaggerated punctuation, or spelling), and creative expressions of emotion (Swan & Shih, 2005; Rourke et al., 1999). According to Dictionary.com (n.d.), in computer communication, an expression can be represented by a string of keyboard characters known as an emoticon or to render some kind of picture or symbol), such as ☺ for a

smile, 😞 for a frown, 😂 for a laughing face, 😲 for surprise, while emojis are little images that can be used in place of or in addition to text. Many depict facial expressions (such as 😊 and 😞), but there are many, many other kinds (such as 👍, 🙌, and 🙏).

Literature shows that paralinguage can be used by online users to express various forms of expressions. A study of paralinguage in a weblog showed that weblog users used a variety of paralinguage to indicate socioemotional expressions as an indicator of affectivity (Luzón, 2011) such as using acronyms (IMHO, FYI). Yet, the study investigated the use of weblog in academic weblogs where bloggers can demonstrate themselves as dynamic and knowledgeable academics, not as novice English users such as FL learners with low proficiency students.

Research Methodology

A mixed-method methodology was used in this study with 22 undergraduate students from a Southern Thai university. They were non-English major students and were formed into 11 groups of four to five through a purposeful sampling as a case participating a CMC learning environment to exchange messages in Facebook Messenger group chat for seven weeks on a voluntary basis. In each week, each group was given a topic that prompted them to converse with one another online in the Facebook Messenger in English. The topics were the same with all groups. Depending on their preference and convenience, the students responded immediately or posted later within a week. The research instruments were a questionnaire with a five-point Likert scale the learners' perception of SP using online text-based interaction quantitatively to examine if they agreed or disagreed with the statement of SP in affective, interactive, and cohesive categories together with their perceived learning from online discussion. The other part was general open-ended questions to reveal the learners' perception of SP qualitatively after the online discussion with Facebook Group Chat. Text messages were also collected by screenshot. SP category and indicators were used to code the text messages. It was assessed how frequently SP indicators appeared in the group conversation. The five-point Likert scale was interpreted using descriptive analysis, and the participants' responses were subjected to theme analysis to measure the learners' perceptions. Pseudonyms were used to de-identify the participants when they were reported in the findings for the ethical principle of anonymity.

To conduct this research responsibly and with respect, the researcher followed appropriate guidelines on relevant ethical processes and applied for approval from the Research Ethics Review of Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University.

Findings and Discussion

In response to how the students used paralinguage in their Facebook group chat, the findings showed that paralinguage use played a major role in establishing the students' affective learning community. In Table 1, 54% of the "Affective" responses

 Proceedings

were the “paralanguage” (i.e., emoticons, exaggerated punctuation, or spelling) indicator as the top indicator. “Self- disclosure” (i.e., sharing personal information, expressing vulnerability) indicator came next with 30%. Then, it was followed by “value” (i.e., expressing personal values, beliefs & attitudes) indicator with 9%. “Humor” (i.e., use of humor – teasing cajoling, irony, sarcasm, understatement) indicator was used second to the least with 4%. And the least used indicator was “emotion” (i.e., use of descriptive words that indicate feelings) indicator with 3%.

Table 1. *Frequency of Social Presence Indicators in Affective Category*

Category & Indicators	Frequency	Percentage
Paralanguage (PL)	1,183	54%
Self-disclosure (SD)	662	30%
Value (VL)	194	9%
Humor (H)	80	4%
Emotion (EM)	61	3%
Total Affective Responses	2,180	100%

The students also reported on their strong agreement that the text-based in helping them express their relaxed feelings through emoticons, emojis, and punctuation (mean=4.33 out of 5 scale). They also felt comfortable to share personal experience during the group chat discussion (mean=4.14) and were willing to join the Facebook group chat when seeing an emotional discussion via emoticons (mean=3.89).

The qualitative findings from open-ended questions revealed that the students could rapport with other students in the group through Facebook group chat. One of them said, “I can build a relationship with my lecturer and my friends through Facebook messenger” (Student 1) and many of them used emoticons.

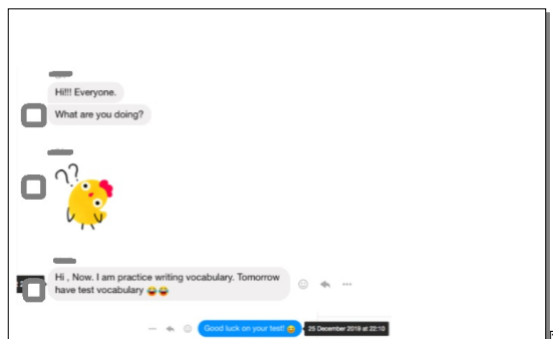


Figure 1. An example of emoticons use in Facebook group chat.

Another result was how the students felt when they used paralinguage. In this study, the students were asked to interact with each other. It was noticeable that the students ended their sentences with emoticons to express how they felt at that moment with ease. One student, Student 1, asked her friends how they were feeling. Student 2, her classmate, expressed that she was tired. This statement evoked an expression of mood from a student who typed in the Facebook group chat: "Today, I feel very tired. 😞" In one topic regarding growing up or childhood memories, a similar exchange took place when another student shared her childhood photo with her statement to disclose her thoughts and feelings: "When I was young, I am a fat kid, I with thin hair, I have tooth decay but I smile [d] a lot. 😊 I liked myself at that time 😊" (Student 3). The role of paralinguage in establishing SP is evident as it creates warmth and friendly environment in text-based CMC. Paralinguage can also be termed as expression of emotion.

Although there are accessible and appealing emojis, a student preferred to use text emoticons. Every time she expressed this gratitude she would type as shown in Figure 2.

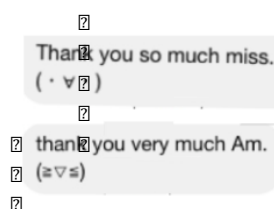


Figure 2. An example of emojis used by Student 4 in Facebook group chat.

One of the indicators of paralinguage is with the use of exaggerated punctuation and/or spelling. It is also considered as a means to emphasize their emotions. In one activity wherein students were asked to look for hidden objects at home in a photo, a

student sent the photo with his answers. Another student was impressed as his classmate was able to find a lot of objects and typed: "Wowwww". A student also conveyed a sense of uncertainty: "Oh Hmm. I'm not sure miss" (Student 5). To express that statement is funny, commonly used text is "Hahaha"; however, Thai students have another way: "55555". In the Thai language, 555 is pronounced as /ha/ symbolizing laughing in Thai sounds; therefore, it is an alternative message for them to represent laughing in their group chat.

Paralanguage was one of the noticeable indicators that revealed in this study as shown in Table 7. And the results showed some influences on language learning. It is a catalyst for communication in English in a digital learning environment for EFL learners in this study, the catalyst which help trigger responses and foster continued conversation. Learners utilized text-based characteristics to communicate their emotions and to compensate for the constrained communication method of MC. This conclusion is consistent with Swan's (2003) content analysis of asynchronous discussions in an online graduate education course, where paralanguage was the most commonly used indicator. The findings of using paralanguage in this study are an evident of how and why SP is used by language learners to present themselves in developing rapport with others in communication as claimed by Kourke et al. (1999) in a digital learning environment because they are in a safe learning space with less anxiety, especially in using English which is not their daily language in this study. Paralanguage may affect the students' language learning in this study in terms of fluency of communication with peers as they said they felt comfortable in joining communication in English. Without hesitation, EFL learners who lack vocabulary probably prefer using emoticons to express ideas rather than taking time to explore unknown words with hesitation, as claimed by Kear (2010). With the use of paralanguage, social interaction can resume in a MC among EFL learners in a digital learning community, whose motivation may be increased.

According to Avery's (2017) literature review, EFL learners who are less fluent in English and rely on physical cues tend to utilize emoticons. In this study, this may also be true for Thai learners as SP may affect the fluency of EFL learners when they joined the group chat and paralanguage may assist them to communicate without delay. Yamada (2009) asserts that in text-based communication, learners have ample time to think and reflect on their meaningful communication with peers with accuracy and fluency. In light of this, Luangrath et al. (2017) note that the use of emoticons and emojis is a form of visual communication based on the teacher-researcher's responses. Hence, the teacher's presence becomes representation in a cyber-text-based communication. Due to the fact that English is the only language used for text-based communication in the Facebook group chats, it is not surprising that this signal was utilized during the group chat activity. When it came to communicating their emotions, the participants compensated for the lack of social indicators by utilizing emoticons, stickers, punctuation, and either capitalization or spelling, which formed the digital

language of learners. On the other hand, "paralanguage" or the use of emoticons, emojis, stickers, or gifs may be seen as informal or "unprofessional" (Dunlap et al., 2016), but this is also a factor in developing SP, which is about the affective side of CMC (Rourke et al., 1999). The informality of these textual representations of nonverbal behaviors and cues can be missed because the learners in this study were previously acquainted with one another and were encouraged to act as if they were in a talking or conversation setting.

Conclusions

At the end of this study, a positive viewpoint that was held by the majority of the students was that they believed the opportunity presented by the virtual engagement which gave them an advantageous setting to improve their use of English when communicating online and the use of paralanguage becomes evidence to show this claim. Similar to Yamada's (2009) study, because of online communication, learners can receive and comprehend information, and will in turn use this means of communication to reply or contribute to the discussion. Also, an objective of delivering language learning is being accomplished because paralanguage helps create a non-threatening atmosphere, and language inputs and expressions are being passed along in the organically occurring discourse that takes place online.

To make it more appealing and encouraging for EFL students to participate in language learning, teachers can take an opportunity to use paralanguage to boost learners' engagement in the classroom by integrating the use of paralanguage into lesson plans when discussing online. Moreover, teachers can design and then incorporate lessons that can trigger responses and foster continued conversation practice through the use of many paralanguage indicators, for example encouraging students to use emoticons in return when reading others' messages. This can enrich communication among EFL learners instead of being silent or being passive interlocutors when focusing on the flow of conversation.

Furthermore, as Facebook group that is widely used nowadays, it can be an easy access for the EFL students to communicate with each other anywhere and anytime with mobile devices. In addition, teachers and instructional designers can maximize the affordances of Facebook group that such as mentioning a call to draw a member's attention, bumping to resend a message, sending of images and graphics and many more. This is to foster their social presence to build an affective learning community.

Lastly, this study was focused on establishing SP with English language learners. There was a lack of information whether how paralanguage can affect students' quality of learning. Therefore, further research should investigate the role of paralanguage in students' language learning such as the effects of using exaggerated punctuation and spelling, and the use of excessive textual paralanguage on learning achievements.

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Appendix E
Accepted Paper

INVESTIGATING EFL LEARNERS' COMMUNICATION IN FACEBOOK MESSENGER GROUP CHATS: A QUANTITATIVE ANALYSIS OF SOCIAL PRESENCE INDICATORS IN ONLINE LEARNING

Abstract

Computer-mediated communication (CMC) via Facebook as social media could support a relaxed and non-threatening learning atmosphere, augmenting EFL learners' engagement through increasing social interaction. To maximize the potential of CMC for English language learning outside of classroom activities, an understanding of communication flow through the lens of Social Presence indicators using Facebook group chats is needed to measure such indicators among EFL learners with a limited access to the real-life use of English. This can help enhance the quality of learning through rich interaction and increased engagement among them. The purpose of this paper was to identify Social Presence indicators used by these EFL learners in their Facebook group chats. The data were collected for eight weeks from 52 Thai undergraduate students taking an English for Conversation course in a Thai university. Using the Social Presence categories by Rourke et al. (1999) and Swan and Shih (2005), quantitative coding was used to analyze the exchanged Facebook group text messages. The results showed that the Interactive Category garnered the highest percentage compared to the Affective and Cohesive Category, suggesting that CMC with Facebook group chats engendered relationship building and sustainability among Thai EFL learners with CMC community members. Pedagogical implications are discussed on the significance of Social Presence for developing an effective CMC environment on Facebook among EFL learners.

Keywords: Social presence; computer-mediated communication; EFL; Facebook group chat

1. Introduction

Social Presence, in this study, is defined as a sense of being with others virtually to build social awareness of a welcoming community for an accessible and open communication platform (Biocca et al., 2003; Gunawardena & Zittle, 1997; Rourke et al., 1999). Social Presence, according to Yamada (2009), is a criterion of successful online learning and can be used to determine how students project themselves online and how they perceive and appreciate others as real persons digitally, especially in computer-mediated communication (CMC). In online learning, Social Presence increases perceived learning, student satisfaction, and interaction (Swan & Shih, 2005).

In language learning, Social Presence can be shaped by the nature of technology allowing different modes of interactions (Wigglesworth, 2020). Students may be willing to communicate depending on various modes of communication such as video, text, or audio (Le et al., 2018)

with different psychological perception and productive output (Yamada, 2009). Moreover, Social Presence plays an important role in determining the value of the flow of online communication, which can help language learners demonstrate engagement (Devi et al., 2017).

Literature shows an advocacy for using Social Presence in examining CMC-based communication among language learners. Teachers can monitor EFL students' interaction using Social Presence in order to establish and develop rich and meaningful communication in a CMC learning environment (Christen, 2013). An understanding of indicators of Social Presence can help EFL learners increase their learning engagement and motivation through enhancing interaction (Saude et al., 2012). It is advocated that the use of Facebook as a CMC learning environment can offer social interaction and meaningful learning among EFL learners (Elverici, 2020) to help EFL learners with limited access to English use in their daily lives to boost communication via the use of English.

Although there have been studies of Social Presence relating to language learning (Akayoğlu, 2011; Devi et al., 2017; Le et al., 2018; Saude et al., 2012; Yamada, 2009; Yildiz, 2009), questions remain over how social presence is presented on a CMC platform outside of online classroom settings. Previous studies regarding online Social Presence (e.g. Devi et al, 2017; Le et al., 2018) are tied up in a course being monitored by teachers, thereby affecting student-students' interaction influenced by the classroom-based curriculum. An examination of Social Presence indicators in a CMC learning environment outside of classroom settings is needed to understand the communication flow among EFL learners who have limited access to the real-life use of English in their everyday lives by creating a productive learning environment. An understanding of interaction patterns in text-based CMC learning environments can help promote EFL learners, thus providing a quality of their learning. The results can support the use of instructional media to enhance the pedagogical practices that are highly interactive with the communicative ideals of university education (Rourke et al., 1999). The purpose of this study is to determine the Social Presence categories using Facebook group chats in order to further enhance and improve student-students' interaction. The study was based on the following research question: What indicators of Social Presence can be observed during the exchange of text messages in Facebook Messenger group chats by Thai EFL students?

2. Literature review

2.1. CMC and its values in EFL contexts

According to Murray (2000), CMC is transactional communication by users through the support of computers. With the rapid development of technologies, CMC has become convenient, eliminates geographical barriers, and settles the issue of time constraints (Swan & Shih, 2005). The affordance of CMC allows for human interactions, which can be made locally or globally (Simpson, 2002).

CMC takes place in two ways: synchronous (SCMC) and asynchronous (ACMC) communication (Hirvela, 2006). SCMC is also known as real-time communication as it requires simultaneous connections such as instant messaging and audio/video conferencing (Barrett, 2008). On the other hand, ACMC is referred to as delayed-time communication because interaction relies on the participants' convenient time. Some examples of ACMC are email and online discussion/bulletin boards (Chapelle, 2003).

In the field of EFL learning and teaching, the contribution of CMC has been acknowledged. The lack of exposure to a target language is one of the problems faced by EFL students (Noom-ura, 2013) and CMC can provide language learners a place to fill the paucity (Moqbel & Rao, 2013). Blake (2000) suggests that there is an increased chance of access to CMC beyond the confines of a classroom wall. This chance can bridge learners' formal and informal learning situations together, providing more opportunities for language development in digital learning environments. Wulandari's (2022) recent study of Social Presence showed that students responded positively to a wide variety of stimuli presented over the course of a single semester. This is consistent with Zeng and Takatsuka's (2009) study of text-based peer-peer collaborative dialogue in a CMC environment that in CMC contexts, students were able to reflect on the target languages and resolve linguistic forms, which improved their language acquisition outside of class.

Although the adoption of CMC has been growing, scholars point out some weaknesses of CMC environments for language learning. For example, the attributes of CMC are limited in rich communication while nonverbal cues are an essential element in communicative language learning, which can compensate the learners' limited language proficiency (Vrasidas & McIsaac, 2000). A lack of physical and social cues in CMC environments can make the interaction impersonal (Ko, 2012). Thus, misinterpretation can interrupt the flow of discourse, especially in text-based communication (Wong, 2007). Theoretically, this drawback of CMC can impede rich interactions and meaningful dialogues among EFL learners if technology is not appropriately selected and learning environments are not well designed for language learners.

Because of the technological revolution in online communication, a different kind of communication has evolved that involves the usage of new word forms, structures, and

expressive styles (Kadir et al., 2013). This suggests that with the use of a target language in online learning environments, learners as users of text-based CMC can gain linguistic practice and exposure that may be beneficial to their proficiency and the way they express themselves online.

2.2. Social Presence in CMC

With the inaccessibility of nonverbal signals in CMC, researchers attempted to investigate interactions in CMC through the notion of social presence (Rourke et al., 1999; Yamada, 2009). According to Short et al., (1976), Social Presence is “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65). Similarly, Wulandari (2022) describes Social Presence in online learning as the students’ capacity for affective and social projection which enhances their credibility as “real people” in online interaction. To Wulandari, this is to facilitate interactions between peers. Wang et al. (2021) asserts that classroom community cohesion is profoundly influenced by the students’ Social Presence. Literature posits that Social Presence is a sense of being with others virtually to garner social awareness to create a welcoming community that makes for an accessible and open communication platform.

Social Presence is one of the CMC attributes that can determine the discourse patterns of the online interlocutors. It is essential to measure Social Presence to help promote rich and meaningful interaction, which is crucial for EFL learning and teaching (Akayoğlu, 2011). To measure Social Presence in CMC, Rourke et. al., (1999) proposed a model of Social Presence indicators through content analysis of conferencing transcripts with three categories: Interactive, Affective and Cohesive categories. According to the authors, the Interactive category involves paying attention or attending to others. It is referred to “building and sustaining relationships, expressing willingness to maintain and prolonging contact, and tacitly indicating personal support” (p. 58). This category is shown with the use of “reply” feature to post messages, quoting directly from the conference transcript, and referring explicitly to content of others’ messages. The Affective category refers to the expression of emotions, feelings, and mood. This is manifested with emotion, humor, and self-disclosure. The last category, the Cohesive category, demonstrates actions that “build and sustain a sense of group commitment (p.59). This is identified as phatics and salutations, vocatives, and addressing the group as “we”, “ours” or “us”.

To extend Social Presence indicators, Rourke et al., (1999) and Swan and Shih (2005) provide simple, yet comprehensive types of the Social Presence categories as shown in Table 1. The comprehensive list of categories with examples provides a useful tool for language teachers, educators, and researchers to assess Social Presence in CMC for pedagogical implications.

Table 1. Social Presence Categories and Indicators

Affective Category			
Indicators	Definitions	Codes	Sources
Paralanguage	Text features to express emotion (i.e., emoticons, exaggerated punctuation, or spelling); creative expressions of emotion	PL	(Rourke et. al, 1999; Swan & Shih, 2005)
Emotion	Expression of emotions using adjectives (i.e., love, sad, hate, silly)	EM	(Swan & Shih, 2005)
Value	Statement of personal point of views (i.e., values, beliefs & attitudes)	VL	(Swan & Shih, 2005)
Humor	Humor usage (i.e., teasing, cajoling, irony, sarcasm, understatements)	H	(Rourke et. al, 1999; Swan & Shih, 2005)
Self-disclosure	Revelation of personal details and demonstrating vulnerability; talks about life experiences beyond class	SD	(Rourke et. al, 1999; Swan & Shih, 2005)
Interactive Category			
Indicators	Definitions	Codes	Sources
Acknowledgement	Direct reference to contents of members' messages	AK	(Swan & Shih, 2005)
Continuing thread	Utilization of software's reply button	CT	(Rourke et. al, 1999)
Agreement/Disagreement	Expression of agreement or disagreement with members' messages	AG	(Rourke et. al, 1999; Swan & Shih, 2005)
Approval	Extension of support, compliments, appreciation, commendation, praise	AP	(Swan & Shih, 2005)
Asking Questions	Raise questions to others or to the teacher; response invitation	AQ	(Rourke et. al, 1999; Swan & Shih, 2005)
Personal Advice	Attempt to give suggestions or advice	PA	(Swan & Shih, 2005)
Cohesive Category			
Indicators	Definitions	Codes	Sources
Greetings & Salutations	Use of social function language to communicate casually; application of greetings and closures (includes feeling questions as general greetings or interaction opener)	GS	(Rourke et. al, 1999; Swan & Shih, 2005)
Vocative	Reference to members by mentioning names	V	(Rourke et. al, 1999; Swan & Shih, 2005)
Group Reference	Cite the group with "we", "us" or "our"; words/phrases that demonstrate inclusion (i.e., let's, shall we)	GR	(Rourke et. al, 1999; Swan & Shih, 2005)
Social Sharing	Small talks especially unrelated to the topic or random socializing	SS	(Swan & Shih, 2005)
Course Reflection	Course-related reflection or sharing evaluation about the course	RF	(Swan & Shih, 2005)

2.3. Previous studies on Social Presence in English language learning

Social Presence helps researchers to explore discourse patterns in a friendly environment. Language learners need to feel the comfortability in an online learning environment to participate in the group conversation without hesitations and gain the satisfaction (Kear, 2010). Devi et al.

(2017) imply that creating a productive learning environment depends on the learners' Social Presence.

Social Presence could be a useful lens to understand learners' productive performance and interaction patterns in CMC learning environments (Le et al., 2018; Yamada, 2009). Wu et al. (2020) examined Social Presence and found that in the text-based forum, students were more likely to get to know peers and establish a sense of community in their online course learning. However, in their study, the voice-based chat room would be more beneficial with the language learning course. In addition, Zohrabi and Farshbafan (2022) explored the EFL teachers' perceptions of strategies for promoting learners' willingness to communicate in online classes. Their findings revealed that the lower social presence of text and audio seems to encourage more introverted students to participate. Giving students to choose which online communication medium to use can motivate shy students and increase their willingness to communicate.

Social Presence could be useful to understand the quality of learning in language learning. Saude et al. (2012) investigated whether online forums accommodate deep and meaningful learning environment for language learners. With Interactive responses as the most frequent category, their results indicated that the virtual learning platform was cold and impersonal. To them, the learning environment seemed to provide monologues and not a conversation process. Moreover, developing relationships and communities is challenging in online forums where participants are often anonymous and frequent interactions between two or more students are unusual. Lim (2023) concludes that Social Presence influences the links between centrality measures, perceived learning results, and satisfaction.

Social Presence literature also provides a better understanding of the role of linguistic and cultural differences in CMC learning environments for language learners. Yildiz (2009), for example, was interested in measuring the role of linguistic and cultural differences. The qualitative data showed that international students who spoke EFL found it challenging to evaluate genuine exchanges in the forum, especially without social context cues, at the start of the course. Quantitative results showed that almost all indicators in the Interactive category were identified in participants' postings, except for personal advice. The study also suggests that forums reduce distance between groups, help English learners practice English and get familiar with the cultural differences. Furthermore, Lee (2002) pointed out that communicators checked their messages before sending their text messages. Voice communication enables learners to express themselves with verbal social/nonverbal cues that facilitate the accuracy of their intended

meanings This suggests that when students are able to project their true selves online, language learning are enhanced and cultural differences on communicating with others are being revealed.

Studying CMC discourse in relation to Social Presence helps gain a better understanding of the conversation flow among online language learners. Akayoğlu (2011) analyzed the discourse patterns of text-based CMC in Second Life. The results showed that the most frequently used Social Presence function was “expression of emotions” and the least frequently used function was “quoting from others’ messages”. Rourke et al. (1999) mentioned that by using emoticons, telling stories or using humor while they communicate in online learning environments, online learners have the capability to project themselves as being ‘real’ and are able to join together with others in digital environments.

With Social Presence indicators, researchers understood how language learners with limited language proficiency were engaged in CMC learning environments. Devi et al. (2017) examined how engineering undergraduates of limited language proficiency had oral communication in the group Facebook activities. The result showed that through expressing their opinions, expressing their agreement, discussing with elaborations, and making a standpoint in their discussions, these learners were able to moderate their oral contacts in a non-threatening environment. Furthermore, indicators of Interactive category were more frequently used than Affective and Cohesive categories. The outcome from their study proves that students with limited language proficiency were able to carry out speech communication productively in a CMC learning environment. However, Swan’s (2003) study of an online graduate course revealed that the most frequently employed indicator was paralinguistic (the use of emojis and emoticons). In a face-to-face classroom setting, the counterpart of paralinguistic is physical cues commonly used by students with limited linguistic knowledge (Avery, 2017). In conclusion, the manifestation of Social Presence indicators online varies depending on the students’ level of language proficiency.

Previous research has addressed the importance of Social Presence in CMC for language learners and for online learning. However, there is a dearth of research in the Thai EFL context on how learners communicate online in CMC learning environments and how to facilitate out-of-class activities that can increase interaction among learners in a CMC environment. The significance of this research lies in determining the flow of conversations when EFL students are to exchange messages in a CMC platform such as Facebook Messenger group chats. More specifically, the purpose of this research study was to investigate the ways Thai EFL learners interacted in a text-based CMC environment in terms of Social Presence categories and indicators.

3. Methodology

3.1. The aim of the study

This paper reports on the quantitative results of the study project that is to investigate the ways Thai EFL learners interacted in a CMC environment based on Social Presence that took place outside of an online classroom setting. This is to help teachers monitor Social Presence to boost learners' communication and to examine their perception. The focus of this article, however, aims at answering the following research question:

- What indicators of Social Presence can be observed during the exchange of text messages in Facebook Messenger group chats by Thai EFL students?

3.2. Participants and the context

This study focused on 52 Thai 3rd-year undergraduate students at the Faculty of Science and Technology at a state university in Thailand. They were from Biology major and Computer Science major, with 11 males and 41 females, aged 18 to 23. They were Thai native speakers who studied English as a foreign language. Their limited English proficiency was at a low to pre-intermediate level based on their English scores for the university admission. They were registered in English for Conversation course, an extracurricular and a non-credit course for basic conversation practice. The participants were recruited through purposive sampling to serve the purpose of the CMC designed learning environment where the selected participants joined the group discussion on Facebook group chats. After the consent forms were distributed and explained, including their right to withdraw, students voluntarily signed the consent forms.

3.3. Technological tool: Facebook group chats

This research was conducted in a text-based CMC environment. The application used in this study was Facebook Messenger, a messaging application that can allow one to interact with others distantly. According to Gordon (2016), Facebook can make communication possible and easier in an online environment without time and place limitation. In addition, this study needed the students to be in-group conversations. According to "Facebook Messenger Update" (2020), Facebook Messenger allows a maximum of 50 participants for group conversations. Lastly, based on the informal discussion in the classroom, all the participants had been using Facebook Messenger to communicate with others, suggesting the students' familiarity with the application.

3.4. Data collection and analysis

The study was conducted under the ethical guidance by Center for Social and Behavioral Science Institutional Review Board, Prince of Songkla University (SBSIRB-PSU)¹ before the data collection. The fifty-two students participated in this study from November 2019 to February 2020 for eight weeks. The explanation of the research was provided before it was conducted. After the consent, the participants were divided into ten groups of four or five in a digital environment due to optimal numbers for online interactions; the number of people involved affects the increase of Social Presence (Akcaoglu & Lee, 2016).

The participants were assigned to voluntarily communicate online with group members on assigned topics for eight weeks (see Table 2), which was not part of the course assessment. According to Gunawardena et al. (2017), simple and interesting topics can help establish open communication and non-threatening environment that may lead to more student interaction opportunities. The topics would prompt them to exchange messages in the Facebook Messenger. The first week was the practice week to enable students to be familiar with the technology tool and the data for this week were excluded. Then, topics were introduced by the teacher-researcher and students were reminded when the topic of the week would start and end.

Table 2. Topics for Facebook Messenger Group Chat Interaction

Week	Topic
1	"Practice Week"
2	Making Friends
3	Hobbies and Interests
4	Health
5	Celebrations
6	Around Town
7	At Home
8	Music / Song

At the end of the activity, 3,261 messages were screen shot and provided the data to be analyzed in terms of Social Presence. Following Lowenthal (2012), the frequency of the indicators was counted after assigning codes to the messages.

3.4. Reliability and validity

¹ IRB No. 2019 PSU-St-QI 015

The purpose of the study was to identify the indicators of Social Presence when the students' exchange text messages in a CMC environment. With quantitative coding, the text messages were coded based on categories and indicators of Social Presence (Rourke et al., 1999; Swan & Shih, 2005). Frequency count was applied to identify the raw counts and percentage at which each indicator occurred. Inter-coder reliability was checked and discussed by two experts and the researcher regarding the use of the Social Presence Category that was adapted from Swan and Shih (2005) and Rourke et al., (1999). The intercoder reliability was established, as there were three coders who cross-checked and discussed the coded text messages, as suggested by Creswell (2014).

4. Results

The question of this study was what indicators of Social Presence were observed during the exchange of text messages in Facebook Messenger group chats by EFL students. Each message displayed one to several Social Presence indicators. The study collected 3,261 responses and identified 6,203 Social presence indicators. As shown in Figure 1, the Interactive category accounted for 40% of the indicators of Social Presence, followed by the Affective category (35%) and the Cohesive category (25%).

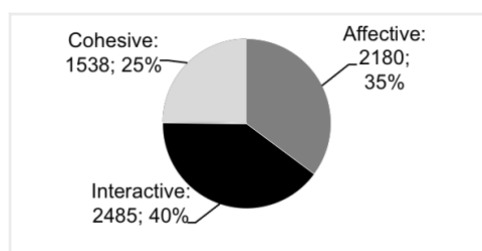


Figure 1. Percentage Distribution of Social Presence Category

As shown in Table 3, all the indicators are present, mostly based on the Interactive category. It can also be seen that most of the messages were “acknowledgement” indicator (referring directly to the contents of the others' messages, quoting from others' messages) with 61% (1,525 occurrences). On the other hand, only 1% or only 24 instances of “personal advice” indicator (offering specific advice to classmates) were observed in the group chat.

Table 3. Frequency of Social Presence Indicators in Interactive Category

Category & Indicators	Frequency	Percentage
Acknowledgement (AK)	1,525	61.0%
Continuing Thread (CT)	405	16.0%
Asking Questions (AQ)	273	11.0%
Approval (AP)	146	6.0%
Agreement/Disagreement (AG)	112	5.0%
Personal Advice (PA)	24	1.0%
Total Interactive Responses	2,485	40.0%

Table 4 shows that like the Interactive category, all the indicators under the Affective category were also observed. The most prevalent indicator observed from the thread was “paralanguage” indicator (features of text used to convey emotion i.e., emoticons, exaggerated punctuation, or spelling) with 54% (1,183 instances), while “emotion” indicator (use of descriptive words that indicate feelings i.e., love, sad, hate, silly) was the least prevalent with 3% (61 instances).

Table 4. Frequency of Social Presence Indicators in Affective Category

Category & Indicators	Frequency	Percentage
Paralanguage (PL)	1,183	54.0%
Self-disclosure (SD)	662	30.0%
Value (VL)	194	9.0%
Humor (H)	80	4.0%
Emotion (EM)	61	3.0%
Total Affective Responses	2,180	35.0%

In Table 5, four of the indicators under Cohesive category were observed except for one. Forty-four percent (677 instances) of the messages displayed “greetings and salutations” indicator (communication that serves a purely social function; greetings, closures) which was the most apparent. In contrast, “course reflection” indicator was not present during the exchange of messages by the students.

Table 5. Frequency of Social Presence Indicators in Cohesive Category

Category & Indicators	Frequency	Percentage
Greetings & Salutations (GS)	677	44.0%
Vocatives (V)	469	30.0%
Social Sharing (SS)	304	20.0%
Group Reference (GR)	88	6.0%
Course Reflection (RF)	0	0.0%
Total Cohesive Responses	1,538	25.0%

4. Discussion

This study aimed to explore how Thai EFL students interacted online by identifying indicators of Social Presence in a CMC environment. In this study, the notion of Social Presence is a benchmark to enable participants in a digital communication space to project their “real” selves. This means that the interaction is between humans mediated by computers, by displaying discourse patterns based on Social Presence categories and appreciation of one another to create a welcoming community that shares common grounds (Biocca et al., 2003; Garrison, 2011; Gunawardena & Zittle, 1997; Rourke et al., 1999; Short et al., 1976).

The results demonstrated the top three indicators of Social Presence (acknowledgement; paralanguage; and greetings and salutations), implying that EFL students in this study were able to represent themselves and appreciate others while they were participating in the Facebook group chat. These three indicators demonstrate recognition from the online community. It was evident that the indicators of the Interactive category were more frequent than the Affective and Cohesive categories, similar to many studies (Satar & Akcan, 2018; Saude et al., 2012; Yildiz, 2009). It is possible to explain that Interactive responses “build and sustain relationships, express willingness to maintain and prolong contact, tacitly indicate personal support” (Rourke et al., 1999, p. 58) with the teacher’s motivational support (Zohrabi and Farshbafan, 2022). The participants mainly exchanged messages through “acknowledgement indicator” that is similar to Lowenthal’s (2009) study. According to Rourke et al. (1999), one of the suitable indicators of interaction is making explicit reference to the content of another’s message. In fact, the rise in Interactive responses in this study was observed. This is consistent with the findings of Swan and Shih’s (2005) study, which found that students consider and build upon the responses of their peers in the CMC environments. The evidence suggests that EFL students can maintain and

extend conversations in text-based online environments, when prompted to do so in their favorable CMC learning environments.

In a CMC environment, it was revealed that despite the participants' limited English proficiency in EFL settings, their display of Social Presence assisted them to be engaged in a meaningful community online through their Interactive category responses influenced by CMC-based instructional tasks (Lowenthal and Dunlap, 2020). This result further supports the idea of Devi et al. (2017) claiming that when students with low language ability were found to use Interactive indicators, they were able to participate in social communication online. Furthermore, the learners were even involved in sharing information unrelated to the topic, thus implying their use of English with ease in a CMC environment (Garrison et al., 1999). Regardless of the participants' language errors, they were able to convey their ideas in English and gained the confidence in the online thread because they were able to perceive the community to be non-threatening. This reaffirmed that through Social Presence, the CMC learning environment allows restricted language learners to have productive performance (Yamada, 2009) and willingness to communicate with others in CMC environments (Le et al., 2018). According to Tu (2002), it is not easy for language learners to convey messages in an environment that lacks physical cues. However, in this study, the absence of nonverbal signals helped decrease nervousness and emotional expression, and this combination yields a non-threatening interaction that is consistent with the study of High and Caplan (2009). Taken together, this allows EFL students to boost their willingness to communicate.

Moreover, the text chat mode of communication in the CMC learning environment helped motivate the participants to refer to and recognize another's messages directly or indirectly (acknowledgement indicator). The students became more comfortable responding to each other, especially with those whom they rarely talked to in traditional classrooms. This may be due to the influence of low Social Presence of the text-based format on Facebook group chat to language learners. The autonomy of the participants to choose between responding synchronously or asynchronously gave them thinking time. The text chat mode provided additional time to prepare responses, especially for shy students. They did not have to worry about being pressed for time and lose face in the process. This study supports evidence from previous observations of Le et al. (2018). In Yildiz's (2009) study, the overall social language ability of EFL learners became an issue when face-to-face interaction, which has high Social Presence, is used. This may result in the avoidance of class participation especially for those who had "poor" English skills. However, it became the opposite when students were reframed to interact online especially outside of the classroom. The participants became less concerned about how others in the online

group would perceive them because they did not have to worry about their sociolinguistic knowledge. Therefore, the notion that CMC mode such as a text-based format allows language learners to participate without apprehensions, consistent with Kear's (2010) study. According to Kear (2010), through open participation and the feeling of engaging in genuine conversations, participants benefit from the online communities. The emergence of "acknowledgement" indicator in the exchange of messages online may be explained by the idea that the feeling of being recognized and/or referred to is critical to influencing the EFL students' English language production.

The results showed that students demonstrated "paralanguage" as a top of Social Presence indicators. Through social interaction, students draw closer to one another through their expressive release of feelings, emotions and/or moods that affect their quality of engagement and interpersonal relationships in the group chat (Rourke et al., 1999), hence the popular use of "paralanguage" indicator from the Affective category. This result is consistent with Lowenthal and Dunlap (2020). Predictably, the utilization of this indicator took place because of the nature of text-based format, and English became their only language tool to exchange messages due to the designed task. The participants made up for the lack of social cues by expressing their emotions using emoticons, stickers, exaggerated punctuations, and spelling or capitalization. Therefore, describing their emotions was relatively rare. In addition, it became their convenient response as it can be a click away to do online. Lastly, "paralanguage" can help EFL students with limited English to express their immediate feelings and daily experiences (Avery, 2017).

The results also showed that most manifestation of "sense of being together" was exhibited through "greetings and salutations", which relates to the use of social communication. This result is akin to the findings of Saude et al. (2012). Although the participants were already familiar with one another, they would still start and end the thread with salutations. Saude et al., (2012) suggest that because students were knowledgeable about social functions, they were able to apply them in online chats. However, it is important to note that English greetings such as "good morning", "hello", "good day" and the like are mostly familiar to the students. To the students, this is a way to let the members of the group know they are present at that time, but they might inactively participate in the online thread. Consequently, "greetings and salutations" help students show that they belong to the group and show courtesy to the members of the group.

One unanticipated result was that course reflection was not prevalent. It was an emergent indicator from the study of Swan (2003) and eliminated from the studies of Satar and Akcan (2018) and Lowenthal (2012). The nature of this study was to let the participants have a virtual chat without the consciousness of formal learning. Hence, the students did not feel the need to

offer personal reflection on how the course affected them. According to Le et al. (2018), when given control to choose their Social Presence, the students become more willing to communicate. Also, the discussion thread activity was not tied to the course grading and the participation was voluntary. As described by (Saude et al., 2012), the exclusion of the activity from the course eased worry about formal learning. They enjoyed communicating with others through informal learning and naturally occurring conversation. The balance of formal and informal learning can be enhanced by the use of CMC.

5. Conclusion

The study presented the Social Presence indicators observed during the exchanges of Facebook messages by Thai EFL students. The results showed that the students were able to represent themselves and appreciate one another by being stimulated to recognize or interact digitally through Social Presence indicators; however, a few indicators (emotion; personal advice; and course reflection) needed improvement to maximize the use of a CMC platform for English language learning.

The Social Presence indicators are the criteria for measuring the participants' social presence, which is why it is helpful for EFL teachers and educators to harness each to gain quality of interaction and increase engagement among language learners. Akayoğlu (2011) suggests that Social Presence helps to better understand how the flow of conversation functions online. Therefore, the results from this study may be fundamental for EFL stakeholders, teachers, and learners while designing and utilizing CMC platforms such as Facebook Messenger group chats to enhance online interaction. EFL Learners must be exposed to more English and supplement their practice with additional exposure. Educators could use online resources in their classes or encourage students to practice their target language in an online environment, for instance, as a possible application of available technology. In addition, the least prevalent Social Presence indicators in this study suggest that EFL educators focus on designing instructional materials for in- or-out-of-class activities that can provide language inputs and expressions via Facebook Messenger. Some examples are to present and to demonstrate language functions as language input for offering personal advice and describing emotions. In this way, the motivation to participate in online interaction may increase and anxiety in online platforms may be reduced among EFL learners, especially for those with low proficiency in English.

Furthermore, a pedagogical implication is that EFL teachers are encouraged to employ Social Presence and Facebook Messenger group chats as a CMC learning environment to enhance online interactions among EFL learners as they can promote meaningful discourse on

topical issues (Devi et al., 2017). This is particularly important in the post-pandemic situation where online learning is essential for education and mobile phones become prevalent among students.

Lastly, this study focused on identifying the Social Presence indicators observed in the text-based discussion thread. There was a lack of information whether students gain language learning outcomes. Therefore, further research should investigate the relationship of the Social Presence indicators to other factors such as language learning outcomes and other types of communication modes (e.g., voice-based messages in EFL settings).

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INVESTIGATING EFL LEARNERS' COMMUNICATION IN FACEBOOK MESSENGER GROUP CHATS: A QUANTITATIVE ANALYSIS OF SOCIAL PRESENCE INDICATORS IN ONLINE LEARNING

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Conflicts of interest/Competing interests – Not applicable

Authors' contributions

All authors contributed to the study conception and design. Material preparation, data collection and analysis were performed by Rizza Cruz and Zainee Waemusa. The first draft of the manuscript was written Rizza Cruz and Zainee Waemusa and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Ethics approval

This research project was conducted under the ethical approval granted by The Center for Social and Behavioral Sciences Institutional Review Board, Prince of Songkla University, Thailand (SBSIRB-PSU) with the approval number: 2019 PSU-St – QI 015, on 31 January 2020.

Consent to participate

Informed consent was obtained from all individual participants included in the study.

Consent for publication

Participants signed informed consent to the submission of the data report published with anonymity in a journal.

VITAE

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List of Publication and Proceeding (If Possible)

Full proceeding

Cruz, R.A., & Waemusa, Z. (2023). Paralanguage Use in EFL Students' Text-Based Communication in Facebook Group Chat: Empirical Evidence from Social Presence Approach. The 15th International Conference on Humanities and Social Sciences (15th ICHiSS): Humanities and Social Science Collaborative Reflections on Language, Culture, and Society for a Sustainable Future.

Accepted paper

Cruz, R.A., & Waemusa, Z. (2023). Investigating EFL Learners' Communication in Facebook Messenger Group Chats: A Quantitative Analysis of Social Presence Indicators in Online Learning. *Teaching English with Technology (TEwt)*. In progress.