

ISSUES

# INVESTIGATING EFL LEARNERS' COMMUNICATION in FACEBOOK MESSENGER GROUP CHATS: A QUANTITATIVE ANALYSIS of SOCIAL PRESENCE INDICATORS in ONLINE LEARNING

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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.

## 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; C. N. 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 (Wrigglesworth, 2020). Students may be willing to communicate depending on various modes of communication

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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. (2022) 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 (Akayoglu, 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.

## ***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

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	Citing 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)

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. Allowing 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 is 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)<sup>1</sup> 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

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<sup>1</sup> IRB No. 2019 PSU-St-QI 015



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

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.

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**

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%).

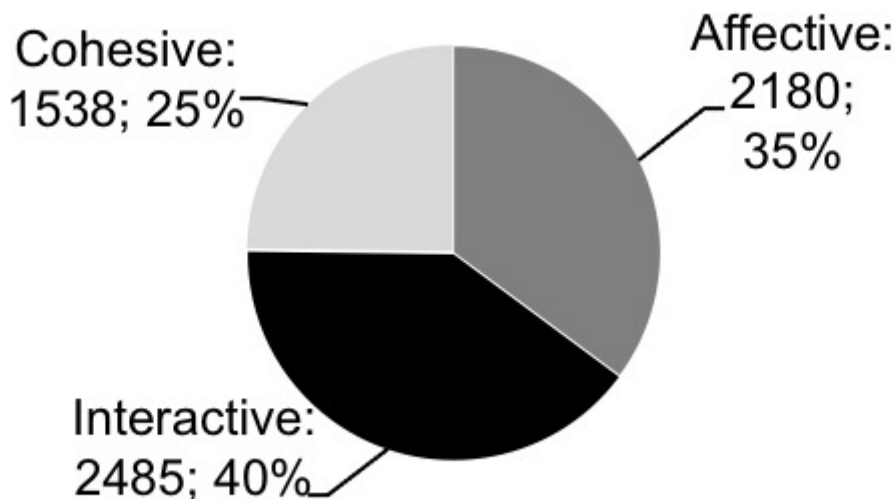


Figure 1. Percentage Distribution of Social Presence Category

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%

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 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).

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;

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%

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%

greetings, closures) which was the most apparent. In contrast, “course reflection” indicator was not present during the exchange of messages by the students.

### 5. 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; C. N. 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 & Farshbafan, 2022). The participants mainly exchanged messages through “acknowledgement indicator” that is similar to Lowenthal’s (2010) 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 & 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.

## 6. 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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### ***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 by 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 – Ql 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.



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