

Investigation of Chinese Undergraduate English-Major Students' Use of Online Communication Strategies

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Abstract

With the advancement of Information and Communication Technology, online learning has been widely adopted in this post-pandemic era. This study aimed to explore the use of online communication strategies by Chinese undergraduate EFL learners and how they vary according to gender and language proficiency. A mixed-method design was applied. A Questionnaire on Online Communication Strategies was distributed to 262 Chinese undergraduate English major students. Three focus group interviews were conducted with 18 students. This paper only reports the quantitative findings. The quantitative findings revealed that the students were at an intermediate level in using online communication strategies. They reported using sociocultural strategies most frequently, followed by compensatory strategies, focus-on-form strategies, interactional strategies, paralinguistic strategies, and lastly reduction strategies. There were significant differences in Chinese undergraduate EFL learners' use of online communication strategies in terms of gender and language proficiency. This study provides a reliable and valid instrument to measure online communication strategies. It also provides systematic and comprehensive online communication strategies conducive to effective communication online.

Keywords: Online Communication Strategies, Undergraduate English-Major Students, Gender, Language Proficiency, Inventory of Online Communication Strategies

Introduction

Online Learning in Chinese Context

Online learning made its debut with the progress of technology and the rise of the internet. The Covid-19 pandemic that occurred in recent years has accelerated the development of online learning. Online graduate and undergraduate programs are expanding significantly in

higher education institutions, as reported by Albrahim (2020), and Alam et al. (2022). As for China, owing to the outbreak and frequent revisits of the Covid-19 pandemic, most universities have conducted online or blended learning from 2020 until 2023. Although most higher institutions have transitioned back to traditional face-to-face learning, a great number of instructors have maintained the use of online learning platforms for homework, group work, group discussion, etc. to assist their teaching and students' learning (Sun et al., 2024). It is reported that the proportion of blended learning in higher education has increased from 34.8% before the pandemic to 84.2% in Feb. 2022 (Wang & Zhao, 2022). Numerous online learning platforms have been applied in this period, with functions such as video conferencing, two-way or multiple-way audio/video communication, collaborative writing, the sharing of screens, word chatting, emojis, virtual background, and recording. Teachers can show vividly and communicate effectively using this software. Therefore, this study focuses on how students communicate effectively in English on this online learning platform.

Online Communication strategies

Selinker introduced the term "communication strategies" in 1972 to characterize the skills or strategies employed by EFL learners in resolving communication challenges. Following her, numerous scholars have put forward their definitions and classifications of communication strategies, which bring full vitality to relevant studies (Váradi, 1980; Canale & Swain, 1980; Dörnyei & Scott, 1997; Nakatani, 2006). However, most of the studies were centered on how students use communication strategies in a face-to-face learning context, which is different from an online setting to a large degree. The online setting is distinct in its restriction of non-verbal cues. In this environment, students may not have the opportunity to see each other or, at times, even the teacher, resulting in reduced eye contact and facial expressions, which may hinder communication between the interlocutors (Aljohani & Hanna, 2021; Aziza, 2021). Nevertheless, there is also a silver lining in online learning. The learning platform enables many functions that may facilitate communication, such as font, colors, emoticons, sharing of images, etc. Thus, in online communication, students are required to adeptly employ various communication strategies to effectively address challenges in expressing their ideas, ensuring comprehension, and acquiring knowledge.

Hung and Higgins (2016) are the pioneers who explored learners' use of communication strategies in synchronous computer-mediated communication (SCMC) environments and came up with a systematic inventory of communication strategies for SCMC. They classified communication strategies in accordance with their functions into six categories: Interactional Strategies, Compensatory Strategies, Reduction Strategies, Focus-on-form Strategies, Sociocultural Strategies, and Paralinguistic Strategies (details in Table 1).

Table 1

Hung & Higgins's (2016) classification of communication strategies in SCMC

Communication Strategist	Subcategories
Interactional strategies (To repair or manage conversational discourse)	Request for clarification Confirmation check Comprehension check Direct request for help Indirect request for help Input elicitation strategies Feigning understanding Inferential strategies Framing Verbal strategy markers omission Time-gaining strategies ...
Compensatory strategies (To solve language problems of expression through manipulating available language knowledge)	Circumlocution Approximation Use of all-purpose words Literal translation Self-rephrasing ...
Reduction strategies (To tackle language problems of expression by changing the intended message)	Message abandonment Message replacement
Focus on form strategies (To attend to target-like forms)	Self-correction Meta-talk Own accuracy check ...
Sociocultural strategies (To sustain a collaborative and friendly interaction)	Social formula Code-switching
Paralinguistic strategies (To solve problems of expression or facilitate language problem and to compensate for the modality restrictions)	Mime Use of text or symbols to display the effects of intonation Use of emoticons Punctuation Substitution

Social Constructivism

According to social constructivism, a social learning theory proposed by Vygotsky, knowledge is constructed through interaction with others (McKinley, 2015), learners are active participants in the creation of their own knowledge, and learning takes place mainly in social and cultural settings (Schreiber & Valle, 2013; Agopian, 2022). Online learning has gained much attention from educators who believe in social constructivism (Ibrahem & Alamro, 2021). Social constructivism in online education focuses on students' interaction with their peers and teachers with a belief that these interactions improve their learning (Bada & Olusegun, 2015). Thus, the learners will construct their knowledge through interaction. However, in EFL learning, students may encounter many difficulties in communication either because of language deficiency or technological or cultural issues. Cultivating EFL online communication strategies will be beneficial for interactions during online learning. Constructivism promotes social and communication skills as students exchange ideas and collaborate in learning activities (Bada & Olusegun, 2015). As the interaction theory indicates,

making the input comprehensive or maintaining the difficulty to $i+1$ is hard to achieve; thus, certain modifications of the conversation can be made, which “allows communication to proceed while exposing the learner to linguistic material which he or she cannot yet handle without [the interlocutor’s] help” (Long, 1983, p. 212). Such modifications can be realized through the use of communication strategies. Moreover, when a learner wants to produce comprehensible output, communication strategies can also help. In addition, in an online environment, some para-linguistic strategies may work to achieve effective communication. Therefore, online communication strategies are conducive to forming effective online communications, leading to good online learning performance.

Research Problem and Need for the Study

The primary objective of language learning is to nurture learners' communicative competence. Communication strategies are closely tied to the acquisition of a second language. Research has shown that new problems and difficulties were displayed in communication and interaction when classes transitioned from offline physical space to online virtual space. (Bui et al., 2021; Li, 2019). Guo and Asmawi (2023) explored the communication between teachers and students in online learning. The findings revealed that students experienced a sense of isolation and misunderstanding due to the absence of non-verbal cues. Additionally, their communication problems were attributed to a deficiency in communication skills or strategies. Hence, a solid grasp of online communication strategies can considerably benefit these students and enhance the quality of their online communication.

Extensive research has been conducted concerning communication strategies in face-to-face communication (Ahmed & Pawar, 2018; Ahmad et al., 2022; Radmehr, 2020; Zhao & Intaraprasert, 2013). Nonetheless, there is a noticeable scarcity of studies exploring communication strategies in an online environment, where the absence of clear non-verbal cues or social interactions may impede communication with interlocutors. (Aljohani & Hanna, 2021; Aziza, 2021; Zamani, 2021; Hung and Higgins, 2016; Omar et al., 2012; Smith, 2003).

Smith (2003), was one of the earliest scholars to explore how communication strategies and task types are interconnected in synchronous computer-mediated communication (SCMC). Her findings indicated that learners employed pragmatic, discourse, and paralinguistic strategies during SCMC. She reported that the absence of the non- and para-linguistic cues, such as gesture, intonation, and gaze, resulted in a substantial use of substitution strategy. Omar et al. (2012), explored 28 learners' use of communication strategies in online discussions via Facebook. Data were collected through online discussions, interviews, retrospective sessions, and reflective journals. They concluded that a number of communication strategies were applied to complete the task, including direct, paralinguistic, digital media, and interactional strategies.

Aziza (2021), reported that fillers, hesitation devices, and gambits were the most frequently used online communication strategies for both genders, with circumlocution being the least utilized. Zamani (2021), conducted a qualitative study using observation and semi-structured interviews with 30 non-native English speakers to explore how EFL learners used mobile devices as communication strategies in a hybrid context. The findings showed that learners used various traditional and digital communication strategies in online communication, and

their choice and usage of communication strategies were affected by factors such as culture, attitude, familiarity, physical context, as well as mobile equipment.

It is still a controversial topic whether gender and language proficiency affect the selection of communication strategies (CS) in language learning. Some studies suggested that male learners utilized more strategies than their female counterparts (Mahardika et al., 2014; Yaman & Özcan, 2015). In contrast, others argued that females employed more communication strategies than males (Wang, 2008; Zhao & Intarapraser, 2013). Conversely, some research indicated no significant gender-based difference in strategy usage (Lai, 2010; Kaivanpanah et al., 2012). Similarly, while some studies reported that learners' choice of CS was significantly correlated with their language proficiency (Alawi, 2016; Aziz et al., 2018), others found no such association (Uztosun & Erten, 2014; Yaman & Özcan, 2015). However, these studies were carried out in traditional face-to-face learning; how gender and language proficiency affect online communication strategies is unknown.

As is seen from the above, previous research on online communication strategies was conducted with the qualitative method and their conclusions varied to a large extent. Therefore, this study aims to fill these gaps by exploring the communication strategies students often use in online learning from both quantitative and qualitative aspects and how they vary in gender and language proficiency. This paper highlights the former aspect.

Research Questions

RQ 1: What online communication strategies do Chinese undergraduate English-major students commonly use in online learning?

RQ 2: Is there any significant difference in the Chinese undergraduate English-major students' use of online communication strategies in terms of gender?

RQ 3: Is there any significant difference in the Chinese undergraduate English-major students' use of online communication strategies in terms of English proficiency?

Method

Research Design

This study uses a mixed methods research design, integrating both quantitative and qualitative data collection methods: an online survey questionnaire, regarded as quantitative, and focus group interviews considered as qualitative. This study adopts the explanatory sequential design (see Figure 1), in which the quantitative data are collected first, and the qualitative data is accumulated after to explain or extend the results obtained from the quantitative data. Data collected in either form are reported separately and respectively. For this paper, only the quantitative data collection and results are reported.

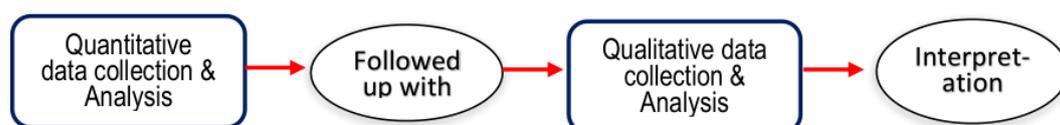


Figure 1 Explanatory sequential design (adapted from Creswell, 2012)

Participants in the Quantitative Study

The participants who filled out the online questionnaire were 262 English major undergraduates randomly chosen from a public university in China, aged from 19 to 25 years old. The students were second-, third-, and fourth-year students; for more details, see Table 2. English-major students were chosen for the following reasons: first, most of the students' courses were English-related, for instance, English listening, speaking, reading, writing, translation, western culture, literature, linguistics, etc. They were immersed in English language learning and had online courses in English for a long time. Thus, they would have more opportunities to employ online EFL communication strategies. Second, there is a nationally acknowledged English proficiency test for English majors (TEM-4) and standards to elevate their English proficiency. According to the Ministry of Education, scores above 80 are excellent, scores between 70-80 are good, scores between 60-70 mean a pass, and scores below 60 mean a fail. The test is conducted in the second year of college; thus, students in the second year and higher were included in this study.

Table 2

Participant Demographic Information

		Number of students
Gender	Male	36
	Female	226
Age Group	19-25	262
Language proficiency	Above 80	26
	70-80	29
	60-70	112
	Below 60	95

Instrument for Quantitative Study

Questionnaire

The online survey questionnaire (Appendix A) was designed based on Hung and Higgins's (2016) Communication Strategy Inventory for SCMC, and consists of 35 closed questions to get the reported frequency of the usage of different online communication strategies. Specifically, there are 9 items for interactional strategies, 4 for compensatory strategies, 4 for reduction strategies, 5 for focus on form strategies, 5 for social-cultural strategies, and 8 for paralinguistic strategies. The Cronbach's alpha for the whole questionnaire was 0.89, which indicated a very high inner consistency of the instrument (Piaw, 2023). The factor loading of all but one item was above 0.7, and only 1 item was above 0.5. The average variance extracted for all constructs were above 0.5, and the composite reliability were all above 0.7, which showed that the questionnaire had good construct validity (Hair & Alamer, 2022).

Data Collection and Analysis

The study was carried out in accordance with the Universiti Malaya Research Ethics Guidelines and was approved by the Universiti Malaya Research Ethics Committee (UMREC). For the quantitative study, the survey link was distributed to undergraduate students via the WeChat group. The participants had about two weeks to complete and submit their responses. All the participants were informed of the nature of the study and expectations of them. They were

clearly told that their participation was voluntary and their choice would not affect their academic grades so that they could reflect their true opinions and quit any time they wanted. Since the questionnaire was in digital form, the data collected can automatically be stored in the online database, downloaded to the personal computer, and transferred into the SPSS software for data analysis. Data analysis was carried out using SPSS 20. Descriptive statistics were displayed.

Quantitative Results

In order to answer RQ1: What online communication strategies do Chinese undergraduate English-major students commonly use, descriptive statistics were shown in the following Table 3.

Table 3

Descriptive Statistics of Online Communication Strategies of Undergraduate Students

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. deviation
IS	262	1.67	5.00	3.2909	.59981
ComS	262	1.75	5.00	3.3511	.66579
RS	262	1.50	5.00	3.2338	.68122
FS	262	1.00	5.00	3.3321	.75331
SoCS	262	1.80	5.00	3.3977	.61013
ParaS	262	1.25	5.00	3.2724	.64571
OCS	262	1.72	4.90	3.3130	.47913
N valid	262				

Notes: OCS (online communication strategies); IS (interactional strategies); ComS (compensatory strategies); RS (reduction strategies); FS (focus-on-form strategies); SoCS (sociocultural strategies); ParaS (paralinguistic strategies)

From the above table and figures, it can be seen that the students were at a medium level in applying online communication strategies, with a mean score of 3.3130 for overall strategies use. Looking at the sub-constructs, Students used sociocultural strategies most frequently, with the highest mean score of 3.3977, followed by compensatory strategies, focus-on-form strategies, interactional strategies, paralinguistic strategies, and lastly reduction strategies.

In order to answer RQ2: Is there any significant difference in the Chinese undergraduate English-major students' use of online communication strategies in terms of gender, Independent Sample T-test was conducted to compare the OCS of male and female students. Prior to T-test, the Normality of the data was first tested (shown in Fig. 2).

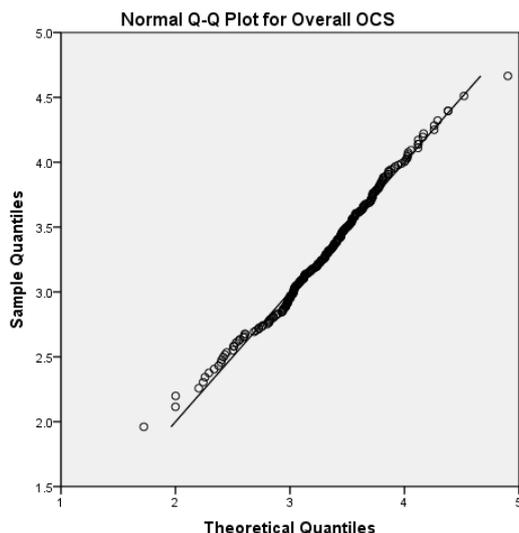


Figure 2 The Normal Distribution of Overall Online Communicative Strategies

It can be seen from the Q-Q Plot that the overall data was normally distributed. Table 4 shows descriptive statistics of the use on online communication strategies by male and female students. Table 5 displays the results of independent T-test.

Table 4

Group Statistics

	Gender	N	mean	Std. Deviation
OCS	1	36	3.1323	.59309
	2	226	3.3418	.45334
IS	1	36	3.0957	.75413
	2	226	3.3220	.56727
ComS	1	36	3.0625	.75208
	2	226	3.3971	.64090
RS	1	36	3.1389	.71575
	2	226	3.2489	.67598
FS	1	36	3.1944	.81747
	2	226	3.3540	.74216
SoCS	1	36	3.2500	.69013
	2	226	3.4212	.59471
ParaS	1	36	3.0521	.75497
	2	226	3.3075	.62127

Notes: Overall (overall online communication strategies); IS (interactional strategies); ComS (compensatory strategies); RS (reduction strategies); FS (focus-on-form strategies); SoCS (sociocultural strategies); ParaS (paralinguistic strategies)

Table 5

Independent Sample T-Test

	T value	P value	Mean Difference	Std. Error Difference
IS	-1.725	.092	-.22635	.13123
ComS	-2.838	.005	-.33462	.11789
RS	-.900	.369	-.11000	.12229
FS	-1.181	.239	-.15954	.13508
SoCS	-1.568	.118	-.17124	.10918
PS	-2.221	.027	-.25544	.11501
Overall	-2.027	.049	-.20953	.10335

Notes: Overall (overall online communication strategies); IS (interactional strategies); ComS (compensatory strategies); RS (reduction strategies); FS (focus-on-form strategies); SoCS (sociocultural strategies); ParaS (paralinguistic strategies)

In Table 4, it can be drawn that female learners employed all online communication strategies more frequently than their male counterparts. Table 5 exhibits that there is a significant difference in the use of overall online communication strategies ($t=-2.027$, $p=.049 < 0.05$) between Chinese undergraduate male and female EFL learners. To take a closer look, they vary significantly, especially in using compensatory strategies ($t=-2.838$, $p=.005 < 0.05$) and paralinguistic strategies ($t=-2.221$, $p=.027 < 0.05$) but not significant in the rest of the strategies.

To answer RQ 3: Is there any significant difference in the Chinese undergraduate English-major students' use of online communication strategies in terms of English proficiency, another independent Sample T-test was conducted. The results are shown in Table 6 and Table 7. Learners with a TEM score above 70 are considered good learners and those with a TEM score below 60 are regarded as poor learners.

Table 6

Group Statistics

	English Proficiency	N	mean	Std. Deviation
IS	2	55	3.5495	.58850
	4	95	3.0444	.62084
ComS	2	55	3.5818	.67880
	4	95	3.1000	.66884
RS	2	55	3.3500	.89701
	4	95	3.1553	.64120
FS	2	55	3.4409	.93784
	4	95	3.0974	.74045
SoCS	2	55	3.5018	.71582
	4	95	3.1811	.59578
ParaS	2	55	3.3205	.78645
	4	95	3.1105	.58285
Overall	2	55	3.4574	.57172
	4	95	3.1148	.49407

Notes: Overall (overall online communication strategies); IS (interactional strategies); ComS (compensatory strategies); RS (reduction strategies); FS (focus-on-form strategies); SoCS (sociocultural strategies); ParaS (paralinguistic strategies)

Table 7

Independent Sample T-Test

	T value	P value	Mean Difference	Std. Error Difference
IS	4.893	.000	.50505	.10323
ComS	4.229	.000	.48182	.11394
RS	1.414	.161	.19474	.13769
FS	2.479	.014	.34354	.13860
SoCS	2.948	.004	.32077	.10881
PS	1.865	.064	.20993	.11257
Overall	3.861	.000	.34264	.08874

Notes: Overall (overall online communication strategies); IS (interactional strategies); ComS (compensatory strategies); RS (reduction strategies); FS (focus-on-form strategies); SoCS (sociocultural strategies); ParaS (paralinguistic strategies)

In Table 6, it can be drawn that good learners employed all online communication strategies more frequently than poor learners. Good learners used compensatory strategies most frequently, followed by interactional, sociocultural, focus-on-form, reduction and paralinguistic strategies. Poor learners used sociocultural strategies most frequently, followed by reduction, paralinguistic, compensatory, focus-on-form and interactional strategies. Table 7 exhibits that there is a significant difference in the use of overall online communication strategies ($t=3.861$, $p=.000 < 0.05$) of Chinese undergraduate EFL learners in terms of English proficiency. To take a closer look, they vary significantly, especially in using

interactional strategies ($t=4.893, p=.000 < 0.05$), compensatory strategies ($t=4.229, p=.000 < 0.05$), focus-on-form strategies ($t=2.479, p=.014 < 0.05$), and sociocultural strategies ($t=2.948, p=.004 < 0.05$). There is no significant difference in the usage of reduction and paralinguistic strategies.

Discussion

RQ1

According to the quantitative results, the students were at an intermediate level in using online communication strategies. They reported using sociocultural strategies most frequently, followed by compensatory strategies, focus-on-form strategies, interactional strategies, paralinguistic strategies, and lastly reduction strategies. The result can be attributed to several reasons: first, Chinese students demonstrated strong cultural awareness (Guo & Asmawi, 2023) and were good at fixed expression patterns, such as “sorry to bother you,” “good morning” etc. Furthermore, They were respectful, emphasized social courtesy, and appreciated diverse cultural perspectives; thus, it is reasonable that sociocultural strategies ranked the highest. Second, the students are English majors, and the university is comparatively good in the country. Therefore, the English proficiency of the students as a whole is at an average level. Thus, they tend to use more compensatory, focus on form and interactional strategies rather than reduction strategies. This aligns with Yaman and Ozcan (2015), who concluded that learners used compensatory strategies most frequently and message abandonment least frequently. Students tried to achieve their communicative goals with more compensatory strategies than reduction strategies (Panggabean & Wardhono, 2017). Compensatory and interactional strategies require more effort and language competence from the learners as they call for a large number of vocabulary and interactions, which is more favoured by learners with above-average English proficiency. This result echoes Alawi (2016) and Aziz et al. (2018), who concluded that learners who were more proficient in English liked to use more compensatory and interactional strategies. Third, Chinese students paid much attention to accuracy in their English output since they were used to the focus-on-form instruction for both grammar and vocabulary favored by their instructors (Sun & Zhang, 2021). Fourth, numerous features such as emojis, font, images, colors, and music were offered in the online environment to enhance communication. Students were not only willing but also adept at utilizing these functions, aligning with findings by Shih (2014) regarding the use of paralinguistic strategies in online discussions. Last, Reduction strategies entail message abandonment and message replacement, which require little effort for explanation or interaction, and are preferred by learners with low English proficiency (Aziz et al., 2018). The students preferred to use every strategy that could help them convey their ideas. If not working, they may consider abandoning or changing a topic as a last resort. This result echoes Idrus (2016), who stated that message abandonment strategies were the least utilized among students.

RQ2

Gender is one of the factors that may affect learners' choices of strategies in second or foreign language learning. The quantitative findings manifested a marginally significant difference in the use of overall online communication strategies ($t=-2.027, p=.049 < 0.05$) between Chinese undergraduate male and female learners. Female learners employed all online communication strategies more frequently than their male counterparts, and they varied significantly, especially in using compensatory strategies ($t=-2.838, p=.005 < 0.05$) and

paralinguistic strategies ($t=-2.221, p=.027 < 0.05$). The findings presented in this paper are in line with Aziza (2021), Yaman and Özcan (2015), and Zhao and Intaraprasert (2013), who observed significant gender-based differences in the use of communication strategies with females employing more strategies than males. Lai (2010) found that Chinese male and female learners used strategies in the same way, which may be because they learned English in the same context. In this study, the difference between male and female learners was at a marginal level, but significant differences were found in compensatory and paralinguistic strategies. It suggested that female were more willing to explain themselves and use nonverbal cues to express their feelings and attitudes. This echoes Kaivanpanah et al. (2012), who stated that females strove to eliminate any room for uncertainty. Consequently, they are more inclined to employ compensatory strategies, such as circumlocution, self-rephrasing, etc. Females also used more emojis than males (Manganari, 2021) since they regarded emojis as more familiar, clear, and meaningful (Prada et al., 2018). Another explanation for females' higher frequency of OCS usage is their self-perception or innate characteristics, which is consistent with Bui and Intaraprasert (2013) that females exhibited a greater positive inclination toward language learning compared to their male counterparts and females were born to be superior at language learning.

RQ3

Language proficiency is an influential factor in the choice of communication strategies. The findings showed a significant difference in the use of overall online communication strategies ($t=3.861, p=.000 < 0.05$) between good and poor Chinese undergraduate EFL learners. Good learners employed all online communication strategies more frequently than poor learners. The result is in contrast to Yaman and Ozcan (2015), who found no significant difference in the use of communication strategies in terms of language proficiency. It is also in contrast to Yaman et al. (2013), who concluded that learners with low English proficiency employed more communication strategies than learners with high English proficiency. However, it supports those who stated that significant differences were found in the use of communication strategies in terms of language proficiency, and good learners used more communication strategies than poor learners (An & Wang, 2022; Panggabean & Wardhono, 2017; Zhao & Intaraprasert, 2013). This may stem from differences in students' motivation levels. Good students may exhibit greater eagerness to seize opportunities to convey themselves in English, thereby engaging more frequently in the use of communication strategies. This implies that high language learning proficiency students, through their efforts in language acquisition, may utilize more communication strategies, which may, in turn, contribute to their status as high language learning proficiency students (Zhao & Intaraprasert, 2013).

According to the descriptive statistics, good learners used compensatory strategies most frequently, followed by interactional, sociocultural, focus-on-form, reduction, and paralinguistic strategies. Poor learners used sociocultural strategies most frequently, followed by reduction, paralinguistic, compensatory, focus-on-form, and interactional strategies. They varied significantly especially in using interactional strategies ($t=4.893, p=.000 < 0.05$), compensatory strategies ($t=4.229, p=.000 < 0.05$), focus-on-form strategies ($t=2.479, p=.014 < 0.05$), and sociocultural strategies ($t=2.948, p=.004 < 0.05$). It can be explained that students with higher proficiency are more capable of using verbal strategies, such as interactional and compensatory strategies, which require higher linguistic competence. For instance, strategies such as inferential, approximation, paraphrasing, and self-correction all demand above-average English proficiency. Learners with lower English

proficiency tend to use more nonverbal strategies, which require less linguistic knowledge, such as sociocultural, reduction, and paralinguistic strategies. Chuanchaisit and Prapphal (2009) also reported that learners with high English proficiency used more focus-on-form strategies, and they either rarely made mistakes or corrected them as soon as they were noticed. In contrast, learners with low English proficiency tended not to use this strategy either because they did not notice their mistakes or could not correct them even if they noticed the error due to their language deficiency.

In summary, high-proficiency learners tried to get the message across by compensatory and interactional strategies, which were more effective in meaning negotiation and improving linguistic competence. They appeared to use communication strategies more effectively, resulting in more explicit expression of their ideas and greater confidence in using English. Low-proficiency learners tended to use more reduction strategies, which were less effective in negotiation, and paralinguistic strategies, which were not helpful for developing linguistic abilities. They ought to utilize available resources without fear of making mistakes in communication while also being aware of the communication strategies employed by proficient students.

Conclusion

This study aims to explore the online communication strategies used among Chinese undergraduate English-major students in an EFL context. According to the quantitative study, the students were at an intermediate level in using online communication strategies. They reported using sociocultural strategies most frequently, followed by compensatory strategies, focus-on-form strategies, interactional strategies, paralinguistic strategies, and lastly reduction strategies. In addition, there were significant differences in Chinese undergraduate EFL learners' use of online communication strategies in terms of gender and language proficiency.

This study provides systematic and comprehensive online communication strategies conducive to effective communication online. The implication is that by giving guidance and direction, the instructors should raise students' awareness and encourage them to use these strategies whenever possible. The teaching emphasis and class activities should be rearranged to cultivate their strategic competence. Teachers are encouraged to offer more speaking space or cooperation opportunities for students. Various types of learning activities should be implemented to enhance student engagement and practice their online communication strategies, such as presentations, group discussions, role-play, and so on. Students' communication competence and English proficiency could be improved by systematic training on online communication strategies.

This study is not without limitations. Firstly, this study employs only Chinese undergraduate English-major students, and it would not be sufficient to make inferences for non-Chinese students, non-undergraduate level students, or even non-English-major students till more research has been done with a broader population. Second, the online communication strategies discussed in this study centered on their usage in online learning using Ding Talk or Tencent Meeting. Casual online communication via Skype, Facebook, TikTok, and other social media is not covered or discussed. Future research may be carried out exploring online communication strategies with larger samples, using students of different backgrounds. Scholars may also focus on systematically teaching online communication strategies through various activities and curriculum design in combination with technology. Moreover, future

studies may shift focus to investigate how teachers perceive and use online communication strategies.

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