ORIGINAL ARTICLE

GENDER INFLUENCES ON LEARNERS' WILLINGNESS TO COMMUNICATE IN ENGLISH USING COMPUTER MEDIATED COMMUNICATION TOOL

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Abstract

Many Malaysian students struggle with English communication after 11 years of learning from primary school to secondary school. Despite extensive research, there is a gap in gender-based studies on learner's willingness to communicate (WTC) in Malaysian settings. Prior findings also reveal that early teens are getting actively engaged in digital communication in the current cyber age and those indications have derived the present study to investigate on the influence of gender and the effectiveness of CMC tool in fostering WTC in English. 224 secondary school students' WTC was measured using a survey to ascertain the influence of gender, and the effectiveness of the CMC tool in raising students' WTC in English was examined using a non-equivalent quasi-experimental study. The survey's Mann Whitney U-test results show male and female learners' WTC significantly differ from one another ($U = 5171.5$, $p = 0.03$). Analysis of mean rank reveals that female has higher WTC than male. While using the CMC tool, learners' WTC significantly differs from those who learn in a regular classroom setting ($U = 605$, $p = 0.01$), based on findings of a non-equivalent quasi experimental study. The analysis revealed that both genders were more likely to communicate in English and were more involved in their learning, partly due to their ability to express opinions verbally and through text, emoji, and other forms of communication. The study also showed that a person's WTC is influenced by their personality, and gender did influence willingness to communicate in English in the Malaysian context.

Keywords: Willingness to Communicate, English, Computer Mediated Communication Tool, Gender, Classroom

Introduction

English is a worldwide language that is incredibly vital in today's world and it is also regarded as the international communication language. In the ranking of the languages of Malaysia, English is given secondary importance after the Malay language and it has been accepted as a second language in Malaysia (Jantmary Thirusanku & Melor Yunus, 2014). In fact, Malaysia, as a heterogeneous country, naturally develops a bilingual atmosphere and a second language (L2) is evidently vital in society in order to converse with people of different races. However, in Malaysian context, Malay language (national language) is widely used as a medium of communication among pluri-ethics. Apart from that, there are certain fields where English is highly emphasized and utilized in Malaysia such as in higher education, business, medical, law and government policies. Of necessity, Malaysians need to have a good command of English not only to communicate and also to compete in the international business market. Therefore, communication of English should be taken into serious consideration in Malaysia.

As a matter of fact, Azman (2016) and Samat, Muthu, and Yunus (2019), both claim that the majority of Malaysian students have difficulties in speaking English. Even though pupils start learning English at age six, Malaysia's circumstance demonstrates that their progress in the language has not been very positive. In line with Kashinathan and Aziz (2021), communication skills among ESL students are usually perceived as complex and difficult to master despite requiring a lot of effort to maintain in accord with the New Straits Times newspaper dated on 6th March 2019, having a good command of English would improve a jobseeker's employability, especially for recent graduates. 64 percent of employers cite a poor command of the language as one of the causes for fresh graduate unemployment in Malaysia (Rozana Sani, 2019). Added in Malay mail, dated November 2nd, 2018, that Malaysian Employers Federation (MEF) executive director, Datuk Shamsuddin Bardan and Datuk Abdul Halim Omar, head of the Malaysian Trade Unions Congress, agree that Malaysian graduates are not keen to be employed due to their incapacity to communicate effectively in English despite having learned it since primary school (Danial Dzulkifly, 2018). Also, The Star newspaper reported that as per a study, English proficiency is one of the top five skills that employers look for when hiring. The president of the Malaysian Employers Federation declared that it was a significant revelation from the MEF Salary Survey for Executives and Non-Executives in 2021 (Lai, 2022). However, the standard and proficiency of English among Malaysian graduates is drastically declining especially in speaking English (D'Silva, 2019 & Zainul Arifin, 2021) even some undergraduates who attained high CGPA in their tertiary education are still not confident to communicate in English (Singh, 2019). Therefore, graduates who are seeking for employment, regardless of position or industry, must have strong English communication skills since graduates' employability has become a major issue in Malaysia, where a high unemployment rate is blamed on inadequate communication skills (Nesaratnam, Salleh, & Yi, 2020). Undoubtedly, English communication is vital in the workplace since it improves efficiency and productivity.

As stated by Aziz and Kashinathan (2021); after studying English for eleven years from preschool to secondary school, Malaysian students are still poor in English communication skills. In the same manner, when these students enter tertiary level, they merely choose not to communicate in English even if they are proficient in the language (Singh, 2019). As a result, many Malaysian graduates fail to pass in the job interviews and they gradually miss the opportunity to be hired by international companies (Siti Zaidah Zainuddin, Dumanig, & Phillip, 2019; Tee, Joanna, & Wirawahida Kamarulzaman, 2022). Ultimately, communicating in English is highly

essential in conveying the ideas and information to the business world in order to compete in the global market among developed countries. Unfortunately, Nadesan and Md. Shah (2018) have mentioned in their study that most of the Malaysian students are passive when it comes to using English language. Particularly, in speaking activities, the majority of secondary school students find it difficult to speak with confidence. Consequently, until today speaking ability has emerged as one of the main areas of worry as Malaysian students struggle to gain significant competency (Nadesan & Md. Shah, 2020).

Towards considering the importance of English communication, currently many researchers began to study Malaysians' willingness to communicate in English language. Lately, there are fairly large number of studies have been carried out in exploring both stable and situational factors, mainly on L2 motivation (Shima Balouchi & Arshad Abdul Samad, 2021; Subramaniam, Shaharudin, Abdul Hamid, & Abdul Wahab, 2021; Noraini Zulkepli, Noor Alhusna Madzlan, Hema Vanita Kesevan, & Siti Nor Amalina Ahmad Tajuddin, 2020), L2 self-confidence (Nur Ilianis Adnan, Mohamad Jafre Zainol Abidin & M. Arif Rahman Hakim, 2020), L2 self-perceived communicative competence (Shima Balouchi & Arshad Abdul Samad, 2021) and also on WTC in virtual learning (Shima Balouchi & Arshad Abdul Samad, 2021; Zulkepli, Tajuddin, AlBakri, Atan, & Abu Bakar, 2019). Overall, those aforementioned researches in Malaysia are generally highlighted on discovering the enduring influences and situational variables involved in willingness to communicate as well as its types and conceptualisation. Therefore, a noticeable gap is found in the research whereby there is a dearth in terms of gender concerning willingness to communicate in English in Malaysian settings (Lo, 2018; Tan, et al., 2020). Most of the studies conducted in Malaysia hugely focus on varsity students and very rarely concentrate on school students. Therefore, this study will explore to willingness to communicate in English among secondary school students in a Malaysian context.

In spite of that, the existence of inconclusive findings or in other word, unclear understanding from previous research studies on willingness to communicate in English involving gender basis (Lo, 2018) is another gap that fosters this present study. It indicates that gender has been shown to have an impact on willingness to communicate in earlier studies. Findings from MacIntyre, Baker, Clement, and Donovan (2002); and Donovan and MacIntyre (2009) claim that female adolescents have high willingness to communicate compared to male adolescents. However, this design reverses in adulthood (Donovan & MacIntyre, 2009). Many scholars find out that adult men are more willing to communicate than female adults (Tannen, 1990; Bursalı & Öz, 2017; Mohammad Amiryousefi, 2018; Sinnett Jr. & Alishah, 2021). Contrarily, Lo (2018) discovers that female ESL teachers engage more often in communicating with their instructors than male teachers. There have also been studies that demonstrate that there are no significant differences in willingness to communicate between males and females as they reach adulthood (Donovan & MacIntyre, 2009; Alemi, Tajeddin, & Mesbah, 2013). Consequently, there are contradictory findings from previous research, whereby willingness to communicate differs in male and female context (Donovan & MacIntyre, 2009). Those indications have derived the present researcher to study on willingness to communicate considering gender as a focus point. In addition, there is a scarcity of study carried out on willingness to communicate among secondary school students, whereby prior studies mostly focus on university students and working adults. According to Donovan & MacIntyre (2009), learners from 11 to 12 years are less willing to communicate compared to middle adolescents. Unlikely, Shamsi (2021) finds out that in the existing cyber age, early adolescents are more engaged in digital communication. This is another gap in the research which boosts this current research by testing on secondary school students'

willingness to communicate using Computer Mediated Communication tool. Many researchers from around the world have expressed an interest in studying the willingness to communicate using Computer Mediated Communication tool. However, very limited studies have been conducted on school students' willingness to communicate using Computer Mediated Communication tool in order to improve students' communication competence in English primarily in the classroom. Therefore, the present study concentrates on Malaysian secondary school students' willingness to communicate in English using Computer Mediated Communication tool.

Research Objectives

As a whole, this present study carries several objectives, and they are mainly formed to test the influence of gender and also the effectiveness of Computer Mediated Communication tool towards willingness to communicate in English among secondary school students. Below are research objectives that are formulated to guide this research study:

1: To investigate the influence of gender on learners' willingness to communicate in English.
2: To study the effectiveness of Computer Mediated Communication tool in enhancing learners' willingness to communicate in English.
3: To investigate the influence of gender on learners' willingness to communicate in English using Computer Mediated Communication tool.

Research Hypothesis

A research hypothesis is an exact, verifiable prediction of the outcome of a study, and its validity must be determined by hypothesis testing. According to Kolawole and Sekumade (2017), the greatest method for ascertaining the veracity of a hypothesis is a thorough demographic analysis. Nevertheless, this study used intentional sampling, or non-random sampling, which means conclusions about the general population should not be drawn from the data. Rather, the findings ought to be construed in light of the study's sample, and no research hypothesis is formulated to guide the inquiry.

Literature Review

Demography of Malaysia

Malay is the official language of Malaysia, with English serving as the second language. Linguistic mixing and code flipping are frequent occurrences, and ethnic languages and dialects are not prohibited in public places. But being of a distinct ethnicity is usually linked to having a different mother tongue. In "National" schools, Malay is taught as the main language, with Mandarin and Tamil offered to students who express interest in learning them. Malaysia is one of the fastest-growing economies in the area and a major player in the Asian Development Bank. In order to draw in foreign investors, staff members need to be well-versed in language, management, and technology. Nonetheless, a large number of Malaysian graduates have a poor opinion of communicating in English, which causes unemployment.

Issues of Teaching and Learning in Malaysian ESL Classroom

English language education in Malaysia is crucial for students, with all students required to learn it for at least eleven years. Three significant changes have been implemented since its inception: the introduction of the integrated English language syllabus for primary schools (KBSR) and secondary schools (KBSM), which incorporated Communicative Language Teaching (CLT) instead of grammatical knowledge; the adoption of the Standard English Language Curriculum for Primary School (KSSR) in 2012, which also included Mathematics and Science, but faced resistance. In 2011, The Council of Europe created the Common European Framework of Reference (CEFR) to guide language practitioners and students in achieving language outcomes. CEFR has six level descriptors, categorizing learners into proficient users, independent users, and basic users. It aims to keep Malaysia in line with global standards and is considered a promising initiative to raise English language standards.

Beyond that, communication skills are a common issue for students in Malaysia, with many experiencing physiological factors such as classroom nervousness, shyness, and anxiety. Additionally, students prefer to explain their opinions in their native tongue when struggling with English, and their limited vocabulary further hampers their ability to speak English. The government has made efforts to address this issue, but graduates' poor English communication skills remain a serious issue, especially during job interviews. The concept of Communication Willingness (WTC) suggests that if second-language learners have a high degree of WTC, their competency will increase over time as they continue to use the language.

L2 WTC

In a Canadian immersion setting, MacIntyre and Charos (1996) studied the interactions of 92 English-speaking learners in a second language. They discovered that a willingness to communicate (WTC) model may be a helpful supplement to the backdrop of readiness to communicate, and that it was best suited for the second language scenario. They maintained that communication openness is a situational factor influenced by both transient and ongoing factors. Additionally, they suggested broadening one's willingness to communicate to encompass other forms of production, like writing and understanding spoken and written language. They also pointed out that studying L1 and L2 has different purposes; L1 is learnt mostly for communicating and building connections, whereas L2 is learnt for a variety of purposes.

A Review of Recent WTC-Related Research

Research on the willingness of second language learners to communicate has been conducted over the past thirty years, with an emphasis on situational and stable variables that fall under the psychological, contextual, and linguistic domains. Learner-internal emotional characteristics such as motivation, personality, self-confidence, perceived opportunity, and desire to communicate are examples of psychological variables. The topic, teacher, classroom environment, and interactional patterns are examples of contextual components. Dependency on L1, grammar, and vocabulary are examples of linguistic variables. Regarding the variables mentioned above, a number of studies have been conducted lately by scholars from various countries, including Japan (Toyoda, Yashima, & Aubrey, 2021), Sweden (Henry, Thorsen, & MacIntyre, 2021), Canada (MacIntyre & Wang, 2021), Iran (Sheybani, 2019; Akdemir A. S., 2019; Sinnett Jr & Alishah, 2021), Pakistan (Fatima, Ismail, Pathan, & Memon, 2020), and Thailand (Karnchanachari, 2019).

L2 WTC Research in Malaysian Context

Apparently, Malaysian academics have also conducted a number of studies on the topic of WTC, focussing primarily on self-perceived communicative competence, motivation, and self-confidence (Muhamad Jafre Zainol Abidin & M. Arif Rahman Hakim, 2020; Muhammad Faisal & Al Amirul Eimer, 2020; Subramaniam, S., et al., 2021; Shima Balouchi & Arshad Abdul Samad, 2021). Malaysian academics have also lately investigated WTC in virtual learning (Zulkepli, N. et al. 2019; Shima Balouchi & Arshad Abdul Samad, 2021). The following are some L2 WTC studies conducted in Malaysian contexts.

In Malaysia, employers and government organisations provide English language training to enhance employees' proficiency in the language. An Oral Communication Skill (OCS) module was created by Nur Ilianis Adnan, Mohamad Jafre Zainol Abidin, and M. Arif Rahman Hakim (2020) to increase the English-speaking propensity of working people in Malaysia. The way the module is structured, with pair work assignments preceding group discussions and individual oral presentations, has been shown to be helpful in getting students warmed up. Moreover, Academic research on university students' propensity to use English for communication reveals that the main drivers are instructional strategy, interest-related themes, peer relationships, and experience linkage. Self-perceived communication skill, motivation, communication anxiety, and attitude all affect one's preparedness for communication.

On top of that, a study on communication willingness was carried out by Tan et al. (2020) among secondary school students in Malaysia, Indonesia, and Thailand. Results of the poll, which involved 1038 students, indicated that ESL students are more willing to communicate than EFL students. The study also discovered that learners of different ages and genders had varied communication settings, which raises questions regarding possible changes in communication willingness when one's interlocutors are the other gender. Consequently, the present researcher intends to investigate gender effects on L2 WTC in further detail.

Gender influences in WTC

According to MacIntyre, Baker, Clement, and Donovan (2002), gender influences communication, but L2 students are all the same. In terms of communication fear and willingness to communicate, women in Canada are more willing than men. This implies that gender variations in L2 communication can go undetected. Donovan and MacIntyre (2004) discovered in a different study that while there are no appreciable differences in communication desire between males and females in high school or university, girls are more inclined to talk than boys in junior high. In a similar vein, Mori and Gobel (2005) discovered that when it came to integrative reasons for studying English as a second language, female students did better than male students. Lahuerta (2014), however, contends that men's greater L2 proficiency may be attributed to their greater familiarity with a broader range of subjects. Furthermore, male immersion students have the strongest orientation towards their jobs, whereas female non-immersion students have the strongest orientation towards their knowledge and personal growth, according to Baker and Macintyre's (2000) communication analysis. However, the results are hard to interpret because there isn't much data on how gender differs in second language acquisition. Meanwhile, a study conducted in 2022 by Yetkin and Özer discovered that female Turkish secondary school students are more receptive to communication in English than male students. This could be attributed to

both their positive attitudes towards the language and societal and cultural prejudices that encourage women to talk more in everyday situations.

Some of the most significant theoretical and contextual gaps in the field of L2 WTC have been identified with the help of the literature study in the previous sections. There are still some gaps in our understanding of willingness to communicate despite the wealth of study on the subject. The availability of conflicting data from earlier research studies, or, to put it another way, a lack of knowledge on gender-based preparedness to communicate in English, is one significant gap that led to the current study (Lo, 2018). Furthermore, in his study, Al-Murtadha (2021) discovered statistically significant gender differences in L2 WTC. Furthermore, prior research has demonstrated a connection between gender and communication readiness. For example, female adolescents are more likely than male adolescents to be willing to communicate (WTC), according to Smith (1997), MacIntyre, Baker, Clement, and Donovan (2002), Donovan and MacIntyre (2003), Cheng and Xu (2022), and Yetkin and Özer (2022). But as people get older, this tendency reverses (Donovan & MacIntyre, 2009). Numerous studies have shown that adult men are more open to communication than adult women (Tannen, 1990; Arshad, Shahbaz, & Al-Bashabsheh, 2015; Bursal & Z, 2017; Mohammad, 2017; Albooni & Ishag, 2020; Li & Li, 2022). Research undoubtedly demonstrates that as people age, there are no appreciable changes in the communication inclinations of men and women (Donovan & MacIntyre, 2009; Alemi, Tajeddin, & Mesbah, 2013; Sinnett Jr. & Alishah, 2021). In summary, other studies have yielded contradictory findings, with considerable differences in the propensity of men and women to communicate (Donovan & MacIntyre, 2009). The present researcher has chosen to investigate gender variations in communication willingness in light of these findings.

CMC use in ESL instruction

Digital technology has a big impact on everyday living, education, and society. Common technologies for digitally mediated instruction include computers and the Internet (Blake, 2017; Pennington & Rogerson-Revell, 2019). These virtual environments clearly promote both synchronous and asynchronous communication, with immersive virtual environments showing the most potential as teaching aids (Alibakhshi & Mohammadi, 2016). Computer-mediated communication, according to Zeng (2017), fosters a language-learning environment by motivating students to bargain and interact with classmates. Learners of second languages possess exceptional prospects to oversee topic choosing and administration via cooperation (Dashtestani, 2018; Fornara & Lomicka, 2019). Technology and education have both revolutionised as a result of modernising teaching and learning with technology (Majid Zeinali Nejad, Mohammad Golshan, & Amin Naeim, 2021).

It is thought that students can participate in discourse functions and negotiation sequences that resemble face-to-face encounters when they are able to communicate with teachers synchronously, or in real-time. Studies, however, have not revealed any appreciable variations in the learning results of students between synchronous chat and asynchronous discussion. Combining the two approaches has produced fruitful outcomes, with some studies demonstrating a variety of shifts in learners' proficiency but typically a notable increase in performance and competence (Al-Rahmi, Alias, Othman, Marin, & Tur, 2018; Moghavvemi, Sulaiman, & Ismawati Jaafar, 2018).

The quick evolution of social media and communication platforms has led to recent research demonstrating a high correlation between L2 WTC and digital learning (Lee & Sylvén, 2021; Shamsi & Bozorgian, 2021). It is vital for educators and researchers to comprehend the influence of computer-mediated communication (CMC) on L2 WTC accomplishments and future endeavours since online communication helps students feel less self-conscious and anxious (Bashori, van Hout, Strik, & Cucchiarin, 2020). Learning in higher education can be greatly enhanced by combining in-person and online courses (Bonvillian & Susan, 2013). Online learning environments are excellent resources for developing authentic learning assignments and for practicing and solidifying language rules. With gender differences in mind and CMC becoming more and more common in L2 learning, this study looks at the simultaneous supply of CMC tools to Malaysian ESL students.

Method

Research Design

The current study uses a quantitative research design in which survey and non-equivalent quasi experimental research were used to fulfil the study's aims. The first objective, to test the influence of gender on learners' willingness to communicate in English, was accomplished using a written survey. Then, the second objective, which was to study the effectiveness of Computer Mediated Communication tool in increasing the willingness of students to communicate in English and the third objective, which was to investigate the influence of gender on learners' willingness to communicate using Computer Mediated Communication tool, were achieved by a non-equivalent quasi experimental study. Only the experimental group had undergone treatment whereby a topic was discussed by learners via Computer Mediated Communication tool (Google Meet), while the control group had discussed the same topic in the classroom in a natural setting.

Population and Sample

This study was conducted at a secondary school in Perak, Malaysia, focusing on willingness to communicate in English among students from diverse socioeconomic backgrounds, races, and proficiency levels. The sample consisted of Form 4 students aged 16, who had studied English for over 11 years. In the first phase, there were 224 Form 4 students had participated in the present study and had completed the questionnaires. In the second phase, the 84 secondary school students who had participated in this non-equivalent quasi experimental study were all in the same form (Form 4) and had participated in first phase in answering questionnaires. The researcher ensured that the students' English proficiency in the both classes was comparable and were taught by the same gender of English teachers. As a result, the study was restricted to the top two science and art classes in Form 4. The school had 21 students in Form 4 Art 1 (4 Art1) and 20 students in Form 4 Science 2 (4 Sc2). These students were chosen to be the part of the control group. Without utilising a CMC tool, these two groups of students were watched in a natural setting. In order to prevent bias in the study, the lesson was taught by their own English teachers using the identical task sheet in the classroom. For experimental group, two more classes, 4 Art2 and 4 Sc1, were selected. The students in these classes learnt the lesson with their respective English teachers using the CMC tool. The lessons were carried out using the same task sheet. All the four classes were monitored at different times.

Instruments

The participants' willingness to communicate was assessed using a L2 WTC scale. This questionnaire was adopted from the study by Xie (2011), which in turn was built upon McCroskey and Richmond's (1990) operationalization of the WTC construct in a more acceptable form for the L2 classroom. The questionnaire contains 15 items about the secondary school students' willingness to participate in communication activities in the classroom. The scale was modified into a five-point Likert scale to make it easier for students to respond. The bilingual questionnaire was developed to improve return rates and collect information from students who were not very proficient in L2. The accuracy of translation was determined using the reverse-translation technique. Initially, the scale was intended to evaluate students' willingness to communicate in Chinese secondary schools, but Seliger and Shohamy (1989) suggested that a pre-built instrument could be altered to fit the specific research situation. Due to the shared Asian culture between China and Malaysia, the study adapted Xie's (2011) questionnaire to examine Malaysian secondary school students' L2 WTC.

Data Collection Procedures

During the first phase, the questionnaire was utilised to collect quantitative data from 224 students in form four at the school. For non-equivalent quasi experimental study in the second phase, an appropriate topic for this study was chosen based on the students' level of language skill and interest. The experimental group used Google Meet for instruction, while the control group discussed the same topic in a classroom setting. During the session, the researcher kept track of how many times each student responded. The act of raising one's hand, posing pertinent queries, and expressing ideas or opinions in the classroom setting were also counted, while in the Google meet, the number of verbal communication attempts, text messages, and smiles was included as well.

Data Analysis

In order to conduct descriptive statistics, the quantitative data from the five-point Likert scale was examined using SPSS Version 26. RQ1 was achieved by analysing data obtained from questionnaire. The dependent variable (WTC) was evaluated on an ordinal scale and differs based on independent variable (gender); hence the Mann-Whitney U test was employed to compare differences between two independent groups. Meanwhile, the non-equivalent quasi experimental design was utilised to determine RQ2 and RQ3. This strategy necessitates two groups, experimental and the control groups. The researcher administered a treatment utilising the Computer Mediated Communication tool (Google Meet platform) to the experimental groups. On control groups, the researcher merely monitored the students in the classroom. The teacher had conducted the lesson in a natural setting. The number of responses from each student during the discussion were recorded. A non-parametric Mann Whitney U-test was used to identify the significant difference between the students' willingness to communicate in each group and in terms of gender towards WTC.

Result

Participant Demography
The demographic overview in this section provides information on the 224 Form 4 secondary school students who answered the survey and the 84 students who participated in the quasi-experimental study.

Survey Participant

The survey data revealed gender, ethnicity, and home language. Results showed an almost equal representation of male and female students, with males comprising 45.5% and females slightly higher at 54.5%. Table 1 displays the ethnic composition of the 224 survey respondents: Chinese (2.1%), Indian (24.1%), and Malay (77.2%). Each ethnics' percentage matches with their language spoken at home.

Table 1
The Demographic Profiles of the Survey Participants

		Frequency, n	**Percentage, %**
Gender	Female	122	54.5
	Male	102	45.5
	Total	224	100
Ethnicity	Malay	173	77.2
	Indian	48	21.4
	Chinese	1	0.4
	Others	2	0.9
	Total	224	100
First language	Malay	173	77.2
	Tamil	48	21.4
	English	1	0.4
	Others	2	0.9
	Total	224	100

Participants of the Non-equivalent Quasi Experimental Study

Four classes of students participated in a quasi-experimental study: control group (42 students, 20 males and 22 females), with ordinary classroom teaching, and experimental group (42 students, 22 males and 20 females), with online class using Google Meet platform.

Table 2
Participants of Quasi-Experimental Study

		Frequency, n	**Percentage, %**
Class	4Art1	22	26.2
	4Art2	19	22.6
	4Sc1	23	27.4
	4Sc2	20	23.8
	Total	84	100
Gender	Female	42	50.0
	Male	42	50.0
	Total	84	100
Control group	Male	20	47.6
	Female	22	52.4
	Total	42	100
Experimental group	Male	22	52.4
	Female	20	47.6
	Total	42	100

Gender differences in learners' WTC

The Mann-Whitney U test showed a significant difference in students' willingness to communicate in English in the classroom between male and female students. Female students were found to be more willing to communicate in English, indicating a gender-specific difference in classroom communication.

Table 3
Gender Based WTC Mann-Whitney U-test Result

	Gender	N	Mean Rank	Sum of Ranks
WTC	Male	102	102.2	10424.5
	Female	122	121.1	14775.5
	Total	224		
Mann-Whitney U	5171.5			
Z	-2.18			
p	0.03			

CMC Tool Usage in Enhancing Learners' WTC

The study investigates the effectiveness of computer-mediated communication tool (CMC) in enhancing students' WTC in English. A quasi-experimental design was used to collect data from four classes of form four students. The control group consisted of 42 students who did not receive any treatment from the researcher. The study recorded their responses and data throughout the class. The experimental group, consisting of 42 students, received instruction and learned via Google Meet (CMC tool). The Mann Whitney U-test was used to analyse the data. The results showed a significant difference in students' willingness to communicate between the two groups. As displayed in Table 4, despite the same number of students in the experimental group, the willingness to communicate among students in the experimental group was higher (49.1) than in the control group (35.9). This suggests that using CMC tool, like Google Meet, indirectly enhances students' willingness to communicate in English.

Table 4
WTC Via CMC tool Mann-Whitney U-test Result

		N	Mean Rank	Sum of Ranks
WTC	Control group	42	35.9	1508
	Experimental group	42	49.1	2062
	Total	84		

Mann-Whitney U	605
Z	-2.534
p	0.011

Female WTC variation with and without CMC Tool

The study examines the variations between female students' WTC in the classroom and female students' WTC when utilising the CMC tool. Table 5 displays the results of the Mann Whitney U-test. The Asymp. Sig. (2-tailed) was found to be .08. As both results exceeded the significance level of .05 (p >.05), there was no difference in the willingness of the female students to communicate in English with or without the CMC tool.

Table 5
Female's WTC Via CMC Tool Mann-Whitney U-test Result

		N	Mean Rank	Sum of Ranks
WTC	Control group	22	18.4	405
	Experimental group	20	24.9	498
	Total	42		

Mann-Whitney U	152
Z	-1.78
Asymp. Sig.	0.075

(2-tailed)

Male WTC variation with and without CMC Tool

The research explores the differences between male students' WTC in the classroom and male students' WTC when using the CMC tool. Using the Mann Whitney U-test, the results were presented in Table 6. It showed that the Asymp. Sig. (2-tailed) was .13. Since values was greater than the significance level of .05 (p > .05), there was no difference in the willingness of the male students to communicate in English with or without CMC tool.

Table 6
Male's WTC Via CMC Tool Mann-Whitney U-test Result

		N	Mean Rank	Sum of Ranks
WTC	Control group	20	18.55	371
	Experimental group	22	24.18	532
	Total	42		

Mann-Whitney U	161
Z	-1.530
Asymp. Sig. (2-tailed)	0.126

Discussion

The research questions mentioned in Chapter 1 are restated and tackled. The goals of the formulated research questions were to ascertain how male and female secondary school students differed in their willingness to communicate in English, as well as how successfully CMC tool worked to encourage this willingness to communicate in both student genders. The discussions are presented as follows.

Gender differences in learners' WTC

The study found a significant difference in the willingness of male and female students to communicate in English in the classroom, with female students showing greater values due to their higher mean rank (121.1) compared to male students (102.2), indicating a greater preference for English communication in the classroom. The current study's findings have, in part, confirmed earlier studies (MacIntyre et al., 2002) about the gender gap in WTC. Furthermore, the current

study conducted in a Malaysian setting has demonstrated the existence of distinct student gender impacts on WTC in the classroom. Furthermore, the results of Yetkin and Özer (2022) and Öksüz Zerey and Cephe (2020) on the gender disparities in secondary school students' willingness to communicate in English are consistent with this conclusion. As a result, this conclusion generally confirms the results of other notable research that found women are more inclined to communicate in English (Smith, 1997; MacIntyre, Baker, Clement, & Donovan, 2002; Donovan & MacIntyre, 2003; Öksüz Zerey & Cephe, 2020; Cheng & Xu, 2022). According to research, female students may have higher WTC in the classroom and prefer to speak with a limited group of close friends (Li & Li, 2022). The present findings may also be explained by the fact that female students are more likely to have a positive opinion of English communication. Furthermore, women may speak more than men in everyday situations because of societal and cultural stereotypes. This scenario could positively impact their engagement in both their first and second language (Yetkin & Özer, 2022).

The current study's result, however, disproves the assertions of (Donovan & MacIntyre, 2009; Alemi, Tajeddin, & Mesbah, 2013; Öz et al., 2014; Öz, 2014) that there are no discernible differences between males and females when it comes to communication willingness. While prior research has focused on WTC outside of the learning context, the current study focused on L2 WTC within the classroom setting. According to research by Baker and MacIntyre (2000), female students opted to use L2 in the classroom, whereas male students preferred L2 communication outside of it. Male adolescents are less likely than female adolescents to be willing to communicate, according to research by Donovan and MacIntyre (2009). But as adults, this pattern reverses, with males showing a greater propensity to speak than females. A large number of scholars from different nations have likewise supported this same claim (Tannen, 1990; Mohammad Amiryousefi, 2018; Sinnett Jr. & Alishah, 2021; Bursalı & Öz, 2017). Therefore, even though these findings suggest that gender discrepancies may stem from situations in which a second language is used, this concept should be approached cautiously in the absence of more research.

CMC Tool Usage in Enhancing Learners' WTC

The research investigates whether computer-mediated communication tool can enhance WTC in English among secondary school students. Results show a significant difference in willingness to communicate in English between students using CMC tool in a classroom setting. The experimental group showed a mean rank of 49.1 more willingness to communicate than the control group. The current data supports Shamsi's (2021) report, which found that teenagers are increasingly using digital communication in the contemporary cyber era. A similar outcome was reported by Heidari and Moradian (2021), who postulated that the significantly higher WTC while using CMC tool in learning could be caused by the new learning environment, which is less immediate than a traditional classroom and encourages more open communication and willingness on the part of the students to express themselves. When they are not constrained by a classroom's four walls, students may feel more confident and less self-conscious, which may encourage them to participate more. A significant contributing factor to pupils' reluctance to communicate may be their fear of losing their faces. This is another noteworthy cause.

Students' inclination to communicate may also be influenced by the inherent benefits of using CMC tool and how it integrates real-world scenarios. As a result, in order to prevent a communication breakdown, students feel additional pressure to express their thoughts.

Additionally, they could become less conscious of and sensitive to their own language flaws. In addition to fostering a more sincere and authentic communication style, the removal of social conventions that are common in face-to-face interactions is another factor contributing to students' greater communication (Heidari & Moradian, 2021). Furthermore, the results support the findings of Yanguas and Flores (2014), who noted a larger percentage of speaking turns completed during oral CMC and a positive correlation between learners' WTC and turn frequency. In addition, the results of Al-Amrani and Harrington (2020) were expected because CMC tool could foster a more accepting environment for feedback and raise students' self-esteem, which in turn allowed them to participate in WTC because there were no social or cultural barriers that might hinder communication in face-to-face settings. Moreover, CMC technologies may be used to provide language learners with authentic encounters where meaning could be negotiated in a less threatening atmosphere.

Similarly, many countries have studied how CMC affects L2 WTC: USA (Yanguas & Flores, 2014), Thailand (Reinders & Wattana, 2010), Japan (Freiermuth & Jarrell, 2006), North America (Kissau et al., 2010), and Turkey (Buckingham & Alpaslan, 2017). All of these studies suggest that CMC can help L2 learners communicate more comfortably and experience lower levels of anxiety overall, which could improve their L2 WTC. Given that MacIntyre, Dörnyei, Clément, and Noels (1998) found that self-confidence increases L2 WTC, greater L2 WTC can be achieved by combining a worry-free L2 learning environment with a favourable self-perception of L2 competence. Al-Amrani's (2021) quantitative data collection unexpectedly produced a fascinating finding. According to his research, when students conversed in English face-to-face (F2F) with strangers or acquaintances, their eagerness to communicate was far higher than when they did so online. Nevertheless, the students' WTC in English was also higher when they utilised the CMC tool to speak in public, small groups, or big meetings than when they spoke with one another one-on-one. Thus, the current study confirms the findings of the previous study, which found that learners are more willing to use CMC platforms to communicate in English, particularly in small groups (classrooms) or even large meetings. Regardless, the results are at odds with those of Mozafarianpour and Tahriri (2016), who examined the impact of CMC on learners' communication and discovered no discernible variations in the communication levels between the experimental and control groups. Nonetheless, the current study proposes that using CMC tool is one tactic to raise students' WTC. As a result, educators are encouraged to review their curricula and methods of instruction in order to motivate their students to communicate in English more frequently.

Female WTC variation with and without CMC Tool

The study found that there was no gender difference in the willingness to communicate in English with or without the CMC tool. A potential explanation for this may be that male students are equally eager to communicate in English both in the classroom and via the CMC utilisation. For female students, the situation is identical. In contrast, according to research by Al-Amrani and Harrington (2020), females had higher WTC online while conversing with classmates or other small groups. One possible explanation for this could be that women are more receptive to strangers than to their peers. Consequently, the study participants might have been less worried about embarrassing themselves and losing face in smaller groups (classrooms) when interacting with friends rather than strangers. This attitude is important in forming interpersonal relationships (Al-Amrani & Harrington, 2020). Nonetheless, the current study, which focused on secondary school students in Malaysia, showed that utilising both the CMC tool and face-to-face interactions,

it is feasible to establish that women's willingness to communicate in English are the same. The similar situation exists for men as well. The researcher found out that only a little amount of research has been done in WTC that compares male and female participants independently using CMC tools. Thus, subsequent study on WTC should focus on the efficacy of CMC tool in WTC in English separately on male and female participants in order to provide a more thorough grasp of WTC and more insightful information about its role utilising CMC tool.

Implication and Significance of the Study

The study aimed to investigate the willingness of secondary school students in Malaysia to use computer-mediated communication tools (CMC) to communicate in English. Previous research on L2 WTC has identified trait and state features that result from the interaction of several environmental, psychological, linguistic, and physiological elements. Factors affecting L2 WTC in the ESL class were both generic and L2-specific, with L2-specific factors being particularly connected to individuals' L2 WTC. Thus, the current study has addressed one of the significant gaps in L2 WTC research by examining gender differences in willingness to use English for communication in Malaysian contexts. The findings have partially confirmed earlier studies that women are more likely to speak in English. Personality trait has been found to indirectly influence L2 WTC through language-related attitudes towards L2 learning and L2 communities. The study also found that female students are more likely to have a positive opinion of English communication and may have a higher word-to-content ratio in the classroom and prefer to communicate with a limited group of close and familiar acquaintances.

In addition, the impact of the gender variable in improving WTC among students in the classroom through the use of the CMC tool is also the study's most important contribution. With the current array of sophisticated technology, individuals are using laptops, tablets, and smartphones at a more advanced level. There are two types of computer-mediated communication: synchronous (e.g., Google Meet and video chat) and asynchronous (e.g., texts and emails). The study found a substantial difference in learners' readiness to communicate in an online platform using the CMC tool as a mediator in the classroom setting. Both genders were more likely to communicate in English and were more involved in their learning. However, the focus of the current study was solely on the Google Meet platform (a synchronous computer-mediated communication tool). As a result, the study found that gender does influence willingness to communicate in English in the Malaysian context, as the gender variable addresses within personality traits in the MacIntyre's (1998) model. Further research on synchronous and asynchronous computer-mediated communication technologies is recommended to enhance L2 WTC study using the CMC tool.

Conclusion

The study examines secondary school students in Malaysia's willingness to use computer-mediated communication tools (CMC) to communicate in English. It found that gender differences in willingness to use English for communication in Malaysian contexts are significant. Female students are more likely to speak in English and have a positive opinion of English communication. The study also found that gender influences willingness to communicate in English in the Malaysian context, as it addresses personality traits in MacIntyre's (1998) model. The study

recommends further research on synchronous and asynchronous CMC technologies to enhance L2 WTC study using the CMC tool. Instructors should make sure that every student has a high WTC, particularly the male students who need extra support. More chances for male students to contribute to class discussions and concentrate on cognitive exercises linked to learning and utilising English should be provided. The effect of CMC tool on learners' excitement for English communication is something that L2 practitioners, curriculum designers, and academics need to be aware of. To help students become more proficient in English, teachers should use online resources like chat rooms, forums, and YouTube videos into their ESL lessons. By staying in contact with colleagues abroad and granting students access to CMC resources, teachers may establish a conducive learning atmosphere for English. Free chat software and computer laboratories with internet access can inspire pupils, boost self-esteem, and facilitate conversation while also facilitating confidence-building. Meanwhile, for better student involvement, the researcher suggests keeping class sizes small, promoting listening, giving students turns, holding private conversations, keeping an eye on things, and acquainting students with the CMC system's features and message forms.

The limitations of this study indicate that bigger sample sizes, longitudinal approaches, inclusion of students from diverse demographics, and additional synchronous and asynchronous CMC-based interventions should be used in future research. Reliable data on gender differences in English communication willingness will come from a bigger sample size. Researchers will be able to collect data from a greater variety of sources and more frequently with longer timelines. Switching to a different platform could provide fresh insights on enhancing English communication. Thus, the necessity for prompt and consistent study to address Malaysian students' reluctance to communicate in English is apparent. This would assist the gradual development of Malaysian graduates' communication skills when they start their postgraduate studies.

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