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Effects of exposure to L2 input and language proficiency on pragmatic competence during study abroad

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Abstract: Developing second language pragmatic competence is crucial because it enables learners to effectively communicate and interact with native speakers of that language. It goes beyond mere grammatical and lexical knowledge, and encompasses the ability to comprehend and produce language in a way that is contextually appropriate and respectful. The quantitative study and group interviews were conducted to investigate the effects of exposure to L2 input and language proficiency on the comprehension and expression of indirect speech acts of 180 Chinese learners of English in Malaysia. The results showed that exposure to L2 input significantly contributed to learners' pragmatic competence at all levels; interactive and instructive exposure to L2 input was more beneficial to the pragmatic improvement; pragmatic competence did not develop in parallel with language proficiency, and increased significantly only after language proficiency reached the intermediate level; pragmatic expression was more influenced by exposure to L2 input, while pragmatic comprehension was more significantly influenced by language proficiency.

Keywords: exposure to L2 input; language proficiency; pragmatic competence; language environment; indirect speech act; second language acquisition

1. Introduction

Many countries and international organizations recognize the significance of pragmatic competence in their language policies. For instance, the Common European Framework of Reference for Languages (CEFR) includes pragmatic competence as one of the key components of communicative language proficiency. It emphasizes the importance of understanding sociocultural norms and appropriate language use in different contexts. Language acquisition encompasses both second language acquisition (SLA), which occurs in a target language environment, and foreign language acquisition, which takes place in a non-target language environment, depending on the learner's context (Hartshorne et al., 2021). With the increasing internationalization of the world, more students are choosing to study in target language countries to gain deeper exposure to the language and culture, making their acquisition processes and influencing factors a critical area of research in SLA.

Research on SLA in the target language environment has examined various aspects such as phonology, vocabulary, grammar, pragmatics, culture, and identity. Specifically focusing on pragmatics, the development of pragmatic competence has been found to be influenced by the target language environment, but it has also been observed that exposure to the target language environment does not necessarily guarantee the development of pragmatic competence (Lang, 2019). Even within an English-speaking environment, the scope and degree of English exposure can vary

significantly, particularly in multilingual environments. Many language learners may only use English in a classroom or dormitory setting, limiting their integration into the target language community. The extent of exposure to L2 input, comprising both the quantity and quality of language exposure, determines the level of comprehension and expression in the second language.

For instance, in a classroom scenario where the teacher delays the class, some students may directly articulate, "Time is up for the class," while others may choose an indirect approach, suggesting, "Maybe we can have a better discussion after a short break." Students who express themselves too directly are not necessarily impolite but often lack the language skills to select the appropriate language within the given context due to limited exposure to L2 input.

In cross-cultural communication, pragmatic errors can have more significant consequences than phonological, grammatical, or semantic errors as they may offend others, impact interpersonal relationships, and result in communication breakdowns (Ran, 2006). The development of pragmatic competence, therefore, becomes a central goal in SLA (Schmidt, 1993) and should be a fundamental objective in international English education.

As the field of SLA continues to evolve, it is essential to investigate the effects of exposure to L2 input and language proficiency on pragmatic competence in multilingual environments. From a state-of-the-art review conducted by Isabelli-García et al. (2018), Taguchi and Collentine (2018) proposed four research needs from a sociocognitive perspective, including engaging in theory construction to build and test hypotheses, redefining study abroad outcomes to explicitly focus on linguistic and intercultural development, exploring the relationship between pre-programmatic linguistic and cognitive abilities and language development during study abroad, and investigating the effects of social contact during study abroad. This research aims to address gaps in the current understanding of language learning during experiences of studying abroad. This study aims to contribute to the existing body of knowledge by examining how exposure to L2 input and proficiency levels impacts individuals' pragmatic skills in such contexts. By employing a mixed-methods approach, combining quantitative analysis of pragmatic competence with qualitative interviews, we seek to gain a comprehensive understanding of the complex interplay between exposure to L2 input, proficiency, and pragmatic development.

2. Literature review

The study of language acquisition depicts the developmental changes in learners' language use and explains the mechanisms of language development. The factors involved in language acquisition in the target language environment include language proficiency, pragmatic competence, exposure to L2 input, intercultural communication competence, learning autonomy, language receptivity, and linguistic and cultural background (Lang, 2019). These factors can be grouped into two categories: contextual factors, which are related to the target language environment, and learner factors, which reflect the individual characteristics of learners. The study of the pragmatics of English as a second language can be explored from these two aspects to verify the joint influence of the external environment of second language

acquisition and learners' internal characteristics on the pragmatics of English as a second language (Taguchi and Li, 2019).

2.1. Exposure to L2 input and pragmatic competence

Exposure to L2 input in this paper refers to the act of input, output, and interaction in which second language learners receive English input and use English to communicate. Among the contextual factors that influence the development of language proficiency, more and more research focus on exposure to L2 input (Kim and Lantolf, 2018; Jiang and Kim, 2020; Taguchi, et al., 2020; Wu and Chang, 2021; Watanabe and LoCastro, 2022). One of the assumptions in second language acquisition is that the target language environment provides learners with better opportunities to develop their pragmatic skills through sufficient exposure to L2 input and social interaction (Taguchi and Roever, 2017). However, not all studies support this hypothesis, and there is still no research that divides the target language environment into monolingual and multilingual environments. For example, Bardo-vi-Harlig et al. (1998) found that learners who learned English in Hungary identified more pragmatic errors than those who learned English in the United States.

What factors influence the development of learners' pragmatic competence? They can be summarized as contextual factors and learner factors. In discussing contextual factors, in addition to comparing the native language environment and the target language environment, scholars have mainly considered the length of learners' stay in the target language country and the frequency of exposure to L2 input (Foote et al., 2021; Han and Huang, 2020; Zou and Li, 2019). In their study of foreigners' acquisition of Chinese politeness, Ho et al. (2009) also suggested that "the adequacy of politeness does not necessarily depend on the learner's language proficiency, but rather on the length of stay in the target country and the frequency of contact with the second language." There is no consensus on the effects of length of stay in the target language on pragmatic competence, and it is controversial whether length of stay is a meaningful independent variable. Therefore, in recent years, it has become less common to study the effects of length of residence on L2 proficiency alone, and researchers have turned to independent variables directly related to communication in the target language, such as exposure to L2 input, intercultural communication skills, and sociocultural adjustment.

In the study of English bilingual pragmatics, there are few studies on exposure to L2 input in multilingual countries, and it is valuable to combine contextual and learner factors. Higher intercultural competence increases the amount of exposure to L2 input, which in turn promotes the development of pragmatic competence (Taguchi et al., 2016). In another study by Taguchi et al. (2019), involving exposure to L2 input and acquisition level, it was found that overall exposure to L2 input was not significantly related to language expression, but for learners with low language proficiency, exposure to L2 input significantly contributed to the development of pragmatic competence. The overall results of this study differ from other studies and suggest that in addition to exposure to L2 input, learners' language proficiency also plays an important role in the development of pragmatic competence.

To measure exposure to L2 input, learners are mainly asked to report the number

of hours they use the target language outside the classroom on a weekly and daily basis to estimate the average number of hours they use the target language per week (Taguchi et al., 2016); or the number of encounters with a scene over a period of time. It has been suggested that the frequency of contact be measured on a five-point scale. Only one study classified exposure to L2 input as interactive or non-interactive (Taguchi et al., 2018) and concluded that interactive exposure to L2 input is more conducive to language use development, but it does not provide a specific theme beyond classification, nor does it analyze the content of specific exposure to L2 input. In terms of research methodology, it was suggested that a combination of quantitative and qualitative research is needed to analyze what factors and how they influence the micro-processes of language development.

2.2. Language proficiency and pragmatic competence

The relationship between language proficiency and the development of pragmatic competence is one of the most important topics of interest to pragmatics researchers. Proficiency is generally classified as an individual learner factor in second language pragmatics research and is usually assessed in terms of grammar and vocabulary acquisition, sometimes taking phonology into account (Taguchi and Roever, 2017). The results of research on language proficiency and pragmatic competence are complex.

One of the complexities is whether language skill development has a facilitative effect on pragmatic development. Most studies have shown that increased language proficiency has an overall positive effect on pragmatic development (Kim, 2015; Roever and Gass 2013; Yuan and Gu, 2018). Learners with high language proficiency express verbal behaviors such as requests and refusals more indirectly and appropriately and are able to understand more of the meaning beyond the words; they exhibit more interactive features in conversations, pay more attention to the mental state of the other party in communication, are more aware of linguistic sequences, and are able to identify more pragmatic errors. Bardovi-Harlig et al. (2017) argue that the development of pragmatic and grammatical competence are two relatively separate and independent processes. In addition, the complexity of findings relating the proficiency and pragmatic competence also lies in that if language proficiency can contribute to the development of pragmatic competence, could it be a stronger predictor than other factors? Roever's study found that length of residence in the target language community was more predictive than language proficiency (Roever, 2012), and Taguchi's study showed that the target language environment had a greater impact on pragmatic competence than language proficiency (Taguchi, 2013). Ren's correlation analysis showed that there is no significant correlation between language proficiency and length of stay in the target language environment, with pragmatic competence, but there is a positive correlation between the frequency with which the target language is used for daily communication and the pragmatic competence (Ren, 2019).

One of the reasons for the inconsistency of the results of studies on language proficiency is that the criteria for measuring language proficiency are not consistent across studies, including the results of standardized tests, the amount of time spent

learning English, and that they are usually divided into two levels, with the intervals between the levels varying. It would be useful to increase the number of levels of language proficiency based on standardized test results to enrich the study of the complex relationship between language proficiency and pragmatic competence.

2.3. Comprehension and expression of indirect speech acts

Speech acts are the building blocks of language use, and understanding them is crucial for analyzing the way people use language in social situations (Searle, 1979). The basic types of speech acts include illocutionary acts, illocutionary acts, and perlocutionary acts. Locutionary acts are the utterances themselves and refer to the literal meaning of the words used by the speaker. For example, "It's raining outside" is a locutionary act that describes the weather situation. Illocutionary acts, on the other hand, are the intended meaning behind the words used by the speaker, such as a request, a command, or a promise. For example, "Could you please pass the salt?" is an illocutionary act that asks the hearer to pass the salt. Perlocutionary acts refer to the effect of the speaker's words on the hearer, such as persuading, convincing, or eliciting emotional responses. For example, "I am sorry to hear about your loss" is a perlocutionary act aimed at expressing sympathy and providing emotional support to the listener.

In addition to these basic types, there are also indirect speech acts that convey meaning indirectly by implicature or inference, such as "It's cold in here" to indirectly ask someone to close the window, and performative speech acts that perform the action described, such as "I now pronounce you husband and wife" during a wedding ceremony. By understanding the different types of speech acts and how they are used in different contexts, we can better analyze how language is used to achieve social goals and how it contributes to the development of language skills and pragmatic competence (Austin, 1962).

The concept of indirect speech acts was introduced by Searle in 1975, as opposed to direct speech acts, which refer to the indirect performance of one speech act by another speech act. Indirect speech act theory examines how a hearer infers indirect additional verbal force from the speaker's literal intention and how a speaker expresses indirect additional verbal force through literal intention (Ho et al., 2009). The former is the understanding of indirect speech acts and the latter is the expression of indirect speech acts, which is also the focus of this study.

Indirect speech acts can be divided into legal indirect speech acts and non-legal indirect speech acts. The former refers to speech acts in which a general inference from the literal meaning can lead to a discourse meaning, such as "Can you lend me a pen?" Non-legal indirect speech acts refer to speech acts in which the intended meaning cannot be determined from the literal meaning alone, but from the context. Indirect speech is often a type of implication, such as "My pen is broken" when you want to borrow a pen. There is a continuum from direct to indirect speech acts, from direct speech acts to legal indirect speech acts to non-legal indirect speech acts.

Studies on the development of pragmatic competence have shown that omnidirectional expression gradually approaches the target language. Therefore, the degree of indirectness of linguistic expression can be used as a measure of language

proficiency (Taguchi and Roever, 2017). Researchers have also developed quantitative criteria to measure indirectness. Studies of English L2 pragmatics have also found a shift from direct to indirect speech acts as English proficiency increases, as time spent in Malaysia increases, and as exposure to English increases (Taguchi, 2013). Moreover, most of the current studies on bilingual English language use have been conducted by native or multi-native Chinese speakers, and most studies ask about speech acts that are either comprehension or expression, and only a few studies have compared the two.

In summary, more research on contextual and learner-specific factors has taken place in the English second language community in recent years. However, more research is needed on the criteria and classification of language competence, the measurement of exposure to L2 input, the combination of contextual and learner-specific factors, the different manifestations of pragmatic competence, and the native language backgrounds of the study participants. In this study, learners from three stages of English learning in Malaysia are taken as the target group, and the quantitative analysis is supplemented by group interviews. The effect of these two factors on learners' pragmatic comprehension and pragmatic expressiveness was examined. The research questions to be explored in this study are as follows:

Research Question 1: What are the effects of exposure to L2 input on second language learners' pragmatic competence in a multilingual environment?

Research Question 2: What are the effects of language proficiency on second language learners' pragmatic competence in a multilingual environment?

These research questions serve as the foundation for investigating the impact of exposure to L2 input and language proficiency on pragmatic competence among second language learners within a multilingual setting.

3. Research methodology

3.1. Research design

This study utilized a mixed-methods approach by combining quantitative research with group interviews. In the initial phase, interviews were conducted with English learners to ascertain their primary sources of English exposure and their language usage patterns. Based on the insights obtained from these interviews, a comprehensive exposure to L2 input scale was developed, consisting of questions pertaining to ten different types of exposure to L2 input, as well as pragmatic comprehension and expression.

Subsequently, a two-factor questionnaire design was implemented, with the first independent variable being the level of exposure to L2 input, and the second independent variable being the level of language proficiency. The dependent variables assessed in this study were the levels of comprehension and expression. In order to explore the relationships between the ten types of exposure to L2 input and the levels of comprehension and expression, correlation coefficients were calculated.

At the conclusion of the study, additional group interviews were conducted with a subset of English learners who participated in the quantitative study. These interviews aimed to provide further validation and insights into the development of pragmatic competence among the participants. The qualitative data gathered from

these interviews complemented the quantitative results obtained from the correlation coefficients analysis.

3.2. Subjects

The subjects for this study consisted of two distinct groups: second language learners and native English speakers. The second language learner group consisted of 180 Chinese English learners who participated in the quantitative study. All participants were currently studying English in universities located in Kuala Lumpur and fell within the age range of 18 to 30 years old. Among them, there were 98 males and 82 females.

The learner group was further divided into three proficiency levels, with 60 learners in each level. The beginner level included learners with an IELTS band score of 5 and below, the intermediate level encompassed learners with an IELTS band score between 5.5 and 6.5 (inclusive), and the advanced level comprised learners with an IELTS band score of 7 and above. Additionally, exposure to L2 input was classified into two categories: high exposure and low exposure. Each language proficiency level included 30 learners representing high exposure and 30 learners representing low exposure.

For the qualitative aspect of the study, a total of 15 English learners participated in group interviews. This involved five learners from each of the three proficiency levels, with the number of group interviews determined based on the optimal group size.

To provide baseline data on comprehension and expression levels of indirect speech acts, an additional 50 native English speakers, all of whom were undergraduate students, were included in the study. This group was balanced in terms of gender and major, with participants selected from both literature and science disciplines.

3.3. Research instruments

The quantitative instruments used for the study are the exposure to the L2 input Scale, the Indirect Speech Acts Comprehension Test, the Indirect Speech Acts Written Blank-Filling Test, and the Indirect Speech Expression Scale.

3.3.1. Exposure to L2 input scale

The exposure to L2 input Scale consists of ten questions, representing ten different types of exposure to L2 input. The Likert six-point scale was used to measure total contact, with positive expressions and a score of 1 for strongly disagree and 6 for strongly agree. The reliability coefficient (Cronbach's Alpha) of the scale was 0.910. The questions were translated into the learners' native language and presented in both Chinese and English, as shown in Table 3. Our classification of the learners' exposure to L2 input was based on the scale, and the total score of 60 was obtained if 6 was selected for all 10 questions on the six-point scale. Initially, we found that the number of learners with scores below 30 and above 30 was almost the same, so we used 30 as the boundary for the classification. (We use a 30-point scale to classify learners as having a high level of exposure to L2 input and a low level of exposure to L2 input.

3.3.2. Indirect speech acts comprehension test

The 18 multiple-choice questions cover three common speech acts: request,

refusal, and complaint, with six questions for each of the three acts. The questions are presented in English and Chinese to avoid comprehension problems associated with vocabulary. Learners' level of understanding of indirect speech acts was reflected in their scores for the test. For example.

Your friend offers you a cup of tea by saying, "I wonder if you'd like something to drink?" What is the indirect speech act being conveyed in this situation, and how would you respond appropriately? (你的朋友给你递上一杯茶，说道："要喝点什么吗？"他的间接言语行为是什么？你如何回应？)

A. *Requesting. Appropriate response: "Yes, please. I would love a cup of tea."*
B. *Declining. Appropriate response: "No, thank you. I'm not thirsty."*
C. *Suggesting. Appropriate response: "Sure, a cup of tea sounds great. Thank you."*
D. *Expressing uncertainty. Appropriate response: "Hmm, maybe. Can I see the options?"*

3.3.3. Indirect speech acts written blank-filling test

In this paper, the indirectness of speech act expression is measured in the form of written discourse complements, in which the contexts are teachers and students, of which the socio-linguistic environment is set at a high level of power and distance, and the topics are presented in both English and Chinese. We used the content of the learner's complements as the basis for scoring the indirectness of expression, reference to previous indirectness scales, and the level of expression of indirect speech acts was reflected in the learner's score in this section, for example:

A knew that B's grandpa had just died, when they met the other day, A said to B: "I'm sorry to hear that your grandpa is dead."

Native speakers rated the degree of indirectness of the above verbal act expressions on the Indirectness Scale.

1= very direct; 2= comparatively direct; 3= somewhat direct; 4= somewhat indirect; 5= comparatively indirect; 6= very indirect.

3.3.4. Indirect speech expression scale

Indirect speech is one of the pragmatic strategies, and the degree of indirectness of verbal expressions is one of the criteria to measure learners' pragmatic competence (Taguchi and Roever, 2017). The indirectness scale was developed to rate the indirectness of learners' verbal expressions as data of learners' verbal level.

3.3.5. Group interview

Before the quantitative study, we used group interviews to understand the learners' exposure to L2 input and pragmatic competence, such as the specific content of exposure to L2 input, the language used in different contexts, problems with language comprehension and expression, and the frequently encountered language contexts. As different levels of learners have different language expressions, in order to get a more detailed description of the learners' status, the group interviews were divided into three groups according to the language proficiency of learners, and information was collected separately. After the quantitative study, the group interviews were conducted once again to exchange information about the questions in the questionnaire.

4. Data analysis and results

4.1. The influence of exposure to L2 input, language proficiency on comprehension of indirect speech acts

The study used exposure to L2 input and language proficiency as independent variables and the comprehension of indirect speech acts as dependent variables, and SPSS statistical software for ANOVA. The results showed that the main effect of exposure to L2 input was significant ($F(1\,174) = 5.867$, $p = 0.016$). As shown in **Table 1** combined with the mean statistics, learners with high exposure to L2 input had a higher level of pragmatic comprehension than learners with low exposure to L2 input. The main effect of language proficiency was significant ($F(2\,177) = 10.791$, $p = 0.000$), and when combined with the means of the three groups of language proficiency, advanced learners had higher pragmatic comprehension than intermediate learners, and intermediate learners had higher pragmatic comprehension levels than primary learners. Further multiple comparisons showed that the difference between primary and intermediate level learners was not significant ($p = 1.000$) and the difference between intermediate and advanced level learners was significant ($p = 0.000$). The difference between advanced-level learners and native speakers was significant ($p = 0.000$, Mean advanced = 16.55, Mean native = 18). The correlation between exposure to L2 input and language proficiency was not significant ($F(2\,174) = 1.721$, $p = 0.182$).

Table 1. Means and standard deviations at the level of comprehension of indirect verbal behavior.

Language level	Low exposure to L2 input level	High exposure to L2 input level
Primary	14.77(2.25)	16.09(1.67)
Intermediate	15.13(2.12)	15.40(2.16)
Advanced	16.58(1.50)	17.17(0.77)

The results showed that the level of exposure to L2 input had a significant effect on learners' pragmatic comprehension, learners with higher exposure to L2 input level had higher pragmatic comprehension levels. For learners of different language proficiency, the pragmatic comprehension level of learners with higher exposure to L2 input level was higher than that of learners with lower exposure to L2 input level. For learners of different language proficiency, the pragmatic comprehension level of learners with higher exposure to L2 input level was higher than that of learners with lower exposure to L2 input level. Language proficiency had a greater effect on pragmatic comprehension levels, but learners with higher levels of indirect speech behavior comprehended more than those with lower levels. However, the development of pragmatic comprehension of learners' indirect speech acts mainly occurred after they reached intermediate language proficiency. Advanced language learners had a greater influence on their comprehension level in general, with a significant gap existing in language comprehension between advanced English learners and native speakers.

4.2. The influence of exposure to L2 input, and language proficiency on the expression of indirect speech acts

The analysis of variance (ANOVA) was conducted with the level of exposure to L2 input and language proficiency as independent variables and the level of expression of indirect speech acts as dependent variables. The statistical results showed that the main effect of exposure to L2 input was significant (F (1 174) = 104.142, p =0.000), and the mean statistics showed that learners with higher exposure to L2 input were significantly more expressive than learners with lower exposure to L2 input. Compared to the effect of exposure to L2 input on the level of comprehension, the effect of exposure to L2 input on the level of expression (F expression = 104.142) was greater than that of comprehension (F comprehension = 5.867). The statistical results also showed that the main effect of language proficiency was significant (F (2 177) = 14.067, p = 0.000), and the higher the learner's language proficiency was, the higher the level of their expression of indirect speech acts was. The results of the multiple comparisons showed that the difference in the indirect level of expression between learners at the primary language proficiency and learners at the intermediate language proficiency was not significant (p = 1.000), while the difference between learners at the intermediate level and learners at the advanced level was significant (p = 0.000), and this result (F expression = 14.067) was the same as the result for the comprehension level (F comprehension = 10.791). In addition, the difference between advanced learners and native speakers was significant (p = 0.002, Mean advanced = 37.88, Mean native = 42.2) when compared to the expression level of native English speakers. The compound effects between exposure to L2 input and language proficiency were not significant (F (2 174) = 2.019, p = 0. 136).

From the **Table 2** we can see, for learners of the same language proficiency level, learners with higher exposure to L2 input had higher levels of expression of indirect speech acts than learners with lower exposure to L2 input.

Table 2. Means and standard deviations at the level of expression of indirect verbal behavior.

Language level	Low exposure to L2 input level	High exposure to L2 input level
Primary	25.94(4.37)	35.83(5.96)
Intermediate	26.48(4.37)	37.27(6.18)
Advanced	32.13(4.73)	39.33(5.77)

There was also a significant effect of language proficiency on expression, but the overall effect was weaker than that of exposure to L2 input. The significant development of the learners' expression level was also the result of reaching the intermediate level. The significant development of learners' expression level also occurred after they reached the intermediate level. There was also a significant gap between the learners' expressions and those of native speakers.

4.3. Correlation between different exposure to L2 input styles and levels of comprehension and expression of indirect speech acts

The study brought together ten ways in which second language learners were

exposed to English through interviews. In order to analyze which ways are more conducive to the development of behavioral pragmatic skills, the correlation between the ten ways of exposure to L2 input and the level of comprehension and expression was calculated separately. There was a significant correlation at the 0.01 level between seven exposures to L2 input styles and the level of expression of indirect speech acts, with the other three exposures at the level of 0.05. Furthermore, the study revealed that five specific exposure styles were significantly correlated with the comprehension levels of indirect speech acts, albeit at the 0.05 significance level (refer to **Table 3**).

Table 3. Exposure to L2 input styles and correlation coefficients with the comprehension level and expression level of indirect speech acts.

exposure to L2 input styles	Level of exposure to L2 input	Comprehension level of indirect speech acts	Expression level of indirect speech acts
1	In class, I always listen, talk, read, and write a lot.	0.150*	0.380**
2	After class, I often use English to communicate with teachers, classmates, waiters, or other people.	0.129	0.479**
3	I often read English books, magazines, websites, and emails.	0.128*	0.433**
4	I often watch English TV shows or movies.	0.069	0.426**
5	I often use English to write emails, send text messages, or use QQ and WeChat to communicate with friends in English.	0.177*	0.533**
6	When I watch English programs or talk to English native speakers, I often write down what they say. (For example, how they say hello, goodbye, thank you, etc.)	0.080	0.339*
7	I often learn to express verbal behavior in the English way, such as greeting, goodbye, thank you, etc.	0.118	0.390*
8	When I don't know how to express myself more politely in English, I often listen to what others say or ask friends and teachers.	0.166*	0.355**
9	When I learn a new word or usage (e.g., different ways of saying hello, euphemisms), I often try to use it.	0.126	0.382**
10	When I feel that I am not speaking well, I often ask my friends or teachers how to speak English more appropriately and properly.	0.165*	0.386*

The above results indicated that language input is more correlated with the level of expression of indirect speech acts than with the level of comprehension of indirect speech acts. The results of the previous ANOVA were again validated. The four questions that were significantly correlated with both comprehension and expression levels reflected interactive exposure to L2 input, learners' attention to pragmatics, and instructive exposure to L2 input were more related to pragmatic development.

4.4. Group interview feedback

In order to further understand the micro-processes of pragmatic development in the multi-lingual environment, qualitative interviews were conducted, and the findings of the interviews can be divided into the following six major themes: 1) expansion of learners' exposure to L2 input through more explanation in both mother language and the second language; 2) learners' attention to pragmatics at different stages of acquisition through offhand language application in daily life; 3) improvement of learners' pragmatic competence through misusing or misunderstanding; 4) convenience in pragmatic error correction in second language acquisition; 5) personal

factors affecting pragmatic development in the multi-lingual environment, and 6) more practical willingness to acquire pragmatic skills.

5. Discussion

Through the investigation of 180 English learners' pragmatic competence in Malaysia, the effects of language contact and language proficiency on learners' pragmatic competence were clarified both at the comprehension and expression aspects. For the parts of language contact styles, the interactive and instructive language contact presented more significant influence on the development of pragmatic competence. The findings have corresponded the previous study by Kim. and Liu and Jackson, that contextual and learning environment did effect L2 English learners' pragmatic competence development (Kim, 2021; Liu and Jackson, 2021), and made a more detailed correlation research among the language contact styles of pragmatic skills. Language socialization theory provides theoretical support for the findings of this study, in which learners use language contact as a way to receive input from English, use English for authentic communication, understand the meaning of English expressions, and imitate native English speakers to express themselves appropriately, gradually developing the ability to understand and express indirect speech acts.

5.1. The role of exposure to L2 input on the development of pragmatic competence

The core components of pragmatic competence encompass pragmatic language competence, social pragmatic competence, contextual awareness, interaction, and learners' individual factors (Taguchi, 2017). Our study affirms the significance of these elements, revealing a significant impact of exposure to L2 input on learners' pragmatic development, consistent with prior research.

Pragmatic language, crucial for discourse understanding and expression, exhibited notable differences based on exposure levels. Limited exposure led to more direct and structurally poor language use, while heightened exposure facilitated appropriateness and a deeper understanding of expressions. Learners, through exposure, acquired correct and culturally appropriate language forms, enriching their linguistic skills.

Socio-linguistic pragmatic competence involves learners' perception of social conditions during communication. Exposure to L2 input serves as a means for accumulating and recalling socio-linguistic knowledge. Our study's context, a dialogue between unfamiliar students and teachers, underscores the role of exposure in developing socio-linguistic skills. Learners, informed by L2 input, grasp social nuances, including polite language use, enhancing their ability to understand and express culturally aligned sentiments.

Contextual awareness, encompassing linguistic features, situational characteristics, and cultural connotations, plays a pivotal role in language expression and comprehension (Yule, 1996). The target language environment provides realistic language interactions, linking language form, function, and environment. Exposure aids learners in understanding expressions within given contexts, exemplified by

learners grasping the euphemistic nature of phrases like "talk later" through repeated exposure.

Individual factors are pivotal in pragmatic competence (Schieffelin and Ochs, 1986). Learners, exposed to a second language within their first language's cultural context, engage in a subjective acquisition process, negotiating language forms between native and second language cultures. For example, some learners integrate their native cultural identity by choosing direct expressions and adding cultural nuances, such as appending a "please". These individual factors encompass attitude, motivation, and intercultural communication skills (Yang, 2016), influencing social exposure and, consequently, language proficiency. Our study reflects a reciprocal relationship between individual factors and language proficiency. Challenges faced by students arriving in Malaysia, initially lacking local friends and exposed to diverse cultures and languages, align with second language socialization. Here, language serves as a medium for learners to build skills, social networks, and identities, contributing to language development (Li et al., 2020).

5.2. The influence of "quality" of exposure to L2 input on pragmatic development

Examining both the "quantity" and "quality" of exposure to L2 input is crucial for effective language development. Identifying four key exposure methods highly correlated with comprehension and expression levels—writing emails and text messages in English, communicating with friends in English through QQ and WeChat, after-class interactions in English, and seeking guidance for polite expressions—reveals the significance of these exposure types. Group interviews further highlight two essential characteristics of high-quality L2 input exposure.

Interactive exposure to L2 input significantly contributes to linguistic competence development. This distinction between non-interactive and interactive exposure types is crucial, with the latter being significantly associated with pragmatic competence. Beyond face-to-face interaction, the study emphasizes the role of WeChat in pragmatic development, offering learners opportunities for repeated observation, imitation, and thoughtful expression, expanding the notion of "interaction" beyond immediate face-to-face interactions.

Exposure to L2 input featuring pragmatic feedback and instruction enhances pragmatic competence. Questions seeking native speakers' insights on language use appropriateness illustrate the importance of explicit instruction. Group interviews underscore the limited explicit guidance from native speakers, emphasizing the need for pragmatic instruction and feedback in language learning. The study reaffirms the significance of teachers' pragmatic awareness and encourages students to actively seek feedback for effective pragmatic development.

5.3. Imbalance between language proficiency and pragmatic competence

The language proficiency-pragmatic development imbalance is primarily tied to learners' cognitive distribution. Pragmatic comprehension and expression become more significant post-intermediate language proficiency, marking the main stage of pragmatic development coinciding with a baseline proficiency in vocabulary and

grammar. Unlike conventional binary classifications, this study categorizes learners into primary, intermediate, and high levels, revealing a dynamic relationship between pragmatic and language proficiency development—pragmatic advancement initiates and accelerates after a certain proficiency threshold. Accumulating linguistic forms and socio-linguistic knowledge for pragmatic expression, typically occurring post-intermediate levels, necessitates time. High-level learner interviews indicate shifting cognitive priorities, transitioning from communicative completion emphasis at lower levels to heightened attention to language appropriateness as vocabulary and grammar proficiency becomes more automatic. Increased exposure to the target language reshapes cognitive allocation, making language use a driving force for development (Hartshorne et al., 2018).

Beyond cognitive allocation, the proficiency-competence imbalance relates to pragmatic awareness. Similarities in indirect speech acts across languages enhance pragmatic transfer (Troudi, 2019), leading to higher awareness levels in learners for shared pragmatic aspects. However, lower language proficiency prompts a preference for direct verbal behavior in English, with learners consciously using indirect forms in their native language but often neglecting them in English usage. Target language environments don't guarantee awareness of specific pragmatic forms; learners must be guided to attend to pragmatic use for enhanced awareness (Taguchi et al., 2016).

5.4. The different effects of exposure to L2 input and language proficiency on pragmatic comprehension and expression

The results of the present study showed that pragmatic comprehension was more influenced by language proficiency than exposure to L2 input ($F_{language\ proficiency}$ = 10.791, F exposure to L2 input = 5.867), and expression is more significantly influenced by exposure to L2 input ($F_{language\ proficiency}$ = 14.067, F exposure to L2 input = 104.142). This phenomenon is related to the different linguistic knowledge and cognitive processes required for each of them.

The comprehension of indirect speech acts is mainly concerned with pragmatic language (Taguchi and Roever, 2017) which is to understand more fixed language use and involves little socio-linguistic knowledge such as power, aggressiveness, and social distance, so the vocabulary and grammar of the language proficiency are more influential in comprehension. The expression of indirect speech acts requires learners to invoke socio-linguistic knowledge to make judgments about the context and then to extract socio-linguistic knowledge for appropriate expressions, which is acquired through explicit or implicit exposure to L2 input. In addition, interaction, which is an important component of pragmatic competence, involves more language expression and needs to be practiced in exposure to L2 input, so the exposure to L2 input level has a more obvious influence on pragmatic expression.

In addition, from the perspective of cognitive processing, comprehension is a receptive process that can be accompanied by speculation, while expression is a process of precise output, in which the learner does not need to analyze too precisely, but can rely on the words and syntax that he or she understands, and infer the intention of the other party in the context. In pragmatic expressions, in addition to the words and phrases involved in general language proficiency, it is necessary to choose the

appropriate use of words according to the context, to conform morphologically to the norms of the target language, and to match form, function, and context.

6. Conclusion

The multi-lingual covering target language environment provides more opportunities for second language learners, but whether the opportunities are exploited depends on contextual factors and individual learner factors. The research explores the effects of exposure to L2 input in contextual factors and language proficiency in learner factors on pragmatic development, using second language learners at different levels of proficiency as the subjects of this study, combining quantitative research and group interviews.

First, the level of exposure to L2 input has a significant impact on the pragmatic competence development of learners at different levels of English. The language is used to acquire linguistic and socio-linguistic knowledge, to develop context sensitivity, to improve interaction skills, and to regulate individual factors. Pragmatic competence is formed in exposure to L2 input and forms the results of linguistic development.

Second, both the quantity and quality of exposure to L2 input influence the development of pragmatics, and there are different ways in which contextual contact is more conducive to pragmatic development than purely receptive exposure to L2 input. Learners' attention to pragmatics and instructive exposure to L2 input can correct learners' pragmatic errors and increase learners' pragmatic awareness to promote accelerated pragmatic development.

Third, language proficiency affects the development of pragmatic competence in general, but most learners' pragmatic development lags behind that of language proficiency. The variation in language proficiency and pragmatic development is not fixed either, as extensive exposure to L2 input is a booster of pragmatic development and helps learners analyze and acquire linguistic knowledge from pragmatic expressions, and increased pragmatic awareness contributes to the transfer of pragmatic competence.

Fourth, exposure to L2 input and language proficiency act on different aspects of pragmatic development. Exposure to L2 input has a more significant effect on pragmatic expression because of the different pragmatic knowledge and cognitive processing required, and language proficiency plays a greater role in pragmatic comprehension.

Based on the above findings, we propose the following recommendations for language teaching from the perspective of the "three levels of teaching". At the teacher's level, it is important to make pragmatic competence one of the goals of language development. In addition to focusing on language skills and elements, it is also necessary to instruct learners to pay attention to pragmatic features in communication and to develop pragmatic awareness. In terms of teaching materials, they should provide linguistic and socio-linguistic knowledge from the input perspective and provide conscious practice from the output side. In addition, in terms of the teaching method, teachers should combine the target language environment with explicit teaching, by using the target language environment to provide learners with

more opportunities to communicate and to direct learners' attention to specific pragmatic features, and using explicit modeling and error correction to directly guide learners' pragmatic comprehension and expression.

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