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Combining computer-mediated communication with data-driven instruction: EFL learners' pragmatic development of compliment responses

Ying Zhang

University of Southern California 3770 S Figueroa St, Los Angeles, CA, 90007, USA

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1. Introduction

Computer-mediated communication (CMC) is currently a robust area of study in the fields of second/foreign language (L2) acquisition and applied linguistics (González-Lloret, 2019). While the majority of previous studies have focused on the linguistic benefits in relation to vocabulary and grammar through CMC (Plonsky & Ziegler, 2016), other subareas remain underexplored; among these is the field of technology-mediated L2 pragmatics. As reviewed in González-Lloret (2019), "since 2016, only 7% of the articles

E-mail address: yingzhangusc@126.com.

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published in Language Learning & Technology focused on pragmatics, and the percentage is even lower for CALICO Journal (2.2%) and ReCALL (1.8%)" (p. 113). This underexplored field is worthwhile investigating since pragmatic competence is one of the vital elements of communicative competence (Canale & Swain, 1980; Cunningham, 2017; Hymes, 1972). Moreover, in the era of globalization, achieving L2 pragmatic competence is more necessary and important than ever (Cunningham, 2016), since it is crucial for L2 speakers to conduct appropriate intercultural communication without causing unnecessary misunderstandings and foster great interpersonal relationships (Cunningham, 2016; Holmes, 1988).

In recent years, the use of CMC to enhance L2 learners' pragmatic competence has been on the rise (for reviews, see González-Lloret, 2019; Taguchi, 2015). In particular, one promising approach in the field of CMC-based L2 pragmatics is the synthesis of CMC and data-driven instruction (Cunningham, 2016; Cunningham & Vyatkina, 2012; Li et al., 2018; Sykes, 2013). Although previous studies suggest that combining CMC with data-driven instruction is conducive to L2 pragmatic development, existing literature is still inconclusive. Some studies reported positive effects of the pairing of CMC and data-driven instruction on L2 pragmatic competence (Cunningham & Vyatkina, 2012; Kakegawa, 2009), whereas others showed no significant improvement (Cunningham, 2016). Hence, further investigation is needed to determine the efficacy of CMC coupled with data-driven instruction in the field of L2 pragmatics. Moreover, most of prior studies examined requests (Cunningham, 2016, 2017; Martínez–Flor, 2012; van Compernolle, 2014). Little research has investigated English as a Foreign Language (EFL) learners' pragmatic development in using other speech acts (e.g., compliment responses), and even fewer studies focus on Chinese EFL learners as the target group. Furthermore, compliment responses (CRs), in particular, are worthwhile investigating because they are very common but frequently problematic speech acts (Yu, 2003). One of the contributing factors is cultural differences, which present a great challenge for EFL learners to appropriately reply to compliments (Cheng, 2011; Golato, 2002; Tang & Zhang, 2009). For instance, EFL learners from Asian countries (e.g., China) may reply to praise differently compared to native speakers of English (Baba, 1996; Chen, 1993; Tran, 2006). Therefore, it is worth exploring EFL learners' CR behaviors to help them reply to praise culturally appropriately and conduct successful intercultural communication in real life without bringing about unnecessary misunderstandings or friction (Holmes, 1988). Additionally, existing literature lacks qualitative data reflecting learners' thought processes and pragmatic choices (Nguyen, 2017). There is a clear need to include more qualitative analyses (e.g., via retrospective interviews) to help researchers and instructors better understand L2 learners' pragmatic behaviors and the cognitive processes of their decision-making (Nguyen, 2017; Taguchi, 2015; Tateyama, 2001).

Given the aforementioned limitations and gaps in existing literature, by adopting a mixed-methods design, this study aimed to have a holistic grasp of the effect of CMC combined with data-driven instruction on Chinese EFL learners' pragmatic development in using compliment responses. Factors that potentially influence L2 learners' thought processes and pragmatic choices are also discussed.

2. Literature review

2.1. Theoretical framework

Schmidt's (1993) "noticing hypothesis" proposed that in order to convert input into intake for language learning, learners need to become aware of particular characteristics in the input such as "linguistic forms, functional meanings, and the relevant contextual features" (p. 35). Schmidt (1995, 2010) also made a distinction between two levels of awareness: *noticing* and *understanding*. Noticing refers to the surface level and "conscious registration of attended specific instances of language" (Schmidt, 2010, p. 725). Understanding is the deeper level of awareness, and it occurs when learners can identify "a general principle, rule, or pattern" (p. 30). Schmidt (2010) further stated that noticing is a requisite for L2 acquisition, and understanding has a facilitative impact on L2 learning.

In accordance with the noticing hypothesis, L2 teachers should implement a pedagogical approach to teaching pragmatics and incorporate meta-pragmatic explanations and awareness-raising activities (Schmidt, 1993). Specifically, explicit meta-pragmatic explanations with metalinguistic information can make the targeted pragmatic features more salient with less ambiguity (Taguchi, 2015). Consequently, "learners who possess explicit knowledge of target-language features may be more likely to notice these features in natural input" (p. 644). Similarly, awareness-raising activities may induce learners to notice and understand certain features that can be easily disregarded in the input (Schmidt, 1993). Consciousness-raising activities such as crosslinguistic comparisons and form-comparison tasks can help L2 learners notice and understand the target feature "by formulating some kind of cognitive representation of how it works" (Ellis, 1994, p. 643). Thus, the awareness that learners establish from consciousness-raising activities may improve their subsequent intake of the targeted pragmatic features.

Although the noticing hypothesis construct is well-established in the field of L2 instructional pragmatics (Taguchi, 2011), the conjunctive use of CMC-based devices has not been examined in depth (Taguchi, 2015). Furthermore, existing research possesses several limitations. One of the primary issues is about the authenticity of data (Nguyen, 2017; Taguchi, 2015). Most of previous studies used Discourse Completion Tasks or Role-Plays to collect data (Nguyen, 2017). Problems with these approaches have been noted (Golato, 2003; Kasper, 2008; Nguyen, 2019; Yuan, 2001). For instance, Oral Discourse Completion Tasks lack the interactive component, authenticity in natural real-world exchanges (Bardovi-Harlig, 2012; Mackey & Gass, 2016), and "real-world consequences" (Nguyen, 2019, p. 199). And role-play skills may not be transferred to real-world interaction (Golato, 2003). Due to the shortage of authentic data in existing literature (Nguyen, 2017; Taguchi, 2015), it is not clear what effect the instruction has exerted on L2 learners' capabilities to conduct "socio-culturally organized activities" (LoCastro, 2003, p.15) when they speak and listen in real-world contexts, including the CMC context. The issue of transfer of learning has rarely been examined in the literature (Taguchi, 2015). This drawback can be addressed by implementing CMC-facilitated interaction (e.g., via online chats) between L2 learners and native speakers. By doing so, not only can learners experience real-time use of the target language in more authentic, genuine, and meaningful interactions (Taguchi, 2015) "with socio-affective and real-world consequences" (Bardovi-Harlig, 2012, p. 157), but

researchers can collect relatively more naturalistic data from learners' real-life interactions with native speakers.

2.2. CMC combined with data-driven instruction in L2 pragmatics

In recent years, one promising approach in the field of CMC-based L2 pragmatics has combined CMC with data-driven instruction (Cunningham, 2016; Li et al., 2018; Sardegna & Molle, 2010; Sykes, 2013). Data-driven instruction refers to a pedagogical intervention that utilizes the data produced by L2 learners and native speakers to develop instructional materials (Cunningham, 2016). It encompasses consciousness-raising activities, meta-pragmatic explanations, production, and discussion (Taguchi, 2015). This instructional approach can not only afford L2 learners' exposure to natural language input of the targeted pragmatic features but provide data for instructors to guide the next steps in lesson planning and delivery.

As reviewed in Taguchi (2015), interventional studies that adopted CMC paired with data-driven instruction reported greater advantages over being only exposed to the targeted pragmatic features. These studies have examined German requests (Cunningham, 2016, 2017; Cunningham & Vyatkina, 2012), German modal particles (Belz & Vyatkina, 2005, 2008), Spanish requests and apologies (Sykes, 2009, 2013), and Japanese sentence-final particles (Kakegawa, 2009). The majority of these studies adopted a pre-test/post-test design, and they implemented production tasks (e.g., Discourse Completion Tasks) or authentic performance-based tasks (e.g., online communication) as assessment measures (Taguchi, 2015). For example, in the context of synchronous CMC (SCMC), Cunningham and Vyatkina (2012) investigated the effect of using SCMC via Web conferences and data-driven instruction on L2 German learners' usage of modal particles. Following the instructional intervention, learners showcased significant improvement in properly using the subjunctive mood to create social distance with native speakers. By adopting a similar research design, three studies conducted by Belz and Vyatkina (2005), Belz and Vyatkina (2008), and Vyatkina and Belz (2006) revealed consistently that CMC in conjunction with data-driven instruction helped L2 learners with their implementation of German modal particles regarding both frequency and accuracy. Taken together, these studies present firm evidence that SCMC coupled with data-driven instruction has a positive effect on L2 pragmatic competence.

Turning to the context of asynchronous CMC (ACMC), Kakegawa (2009) explored L2 Japanese learners' usage of four sentence-final particles (SFPs) (i.e., ne, yone, no, and yo) through email correspondence. After the data-driven instruction containing meta-pragmatic explanations of SFPs and awareness-raising activities, learners were able to not only use SFPs more frequently but employ a wider range of them in their emails.

Although previous studies have reported positive effects of CMC paired with data-driven instruction on L2 learners' pragmatic competence (Cunningham & Vyatkina, 2012; Kakegawa, 2009; Sardegna & Molle, 2010), existing literature is still inconclusive with many studies demonstrating no significant improvement or variations across L2 pragmatic features (Cunningham, 2016; Li et al., 2018). For instance, Cunningham (2016) examined the influence of CMC and data-driven instruction on L2 German learners' usage of making requests. Results revealed that learners' L2 pragmatic performance was not significantly improved after the instructional intervention. Another more recent study conducted by Li et al. (2018) investigated the effect of CMC paired with data-driven instruction on L2 Chinese learners' use of four sentence-final particles (i.e., a, ba, ne, and ya). Results showed that learners' developmental pace varied across the four particles after the instruction.

To summarize, although interventional studies of L2 pragmatics in the CMC context have increased over the past decade (Cunningham, 2016, 2017; Cunningham & Vyatkina, 2012; Li et al., 2018; Sardegna & Molle, 2010; Zhang, 2020), "empirical data is still considerably limited" (Taguchi, 2015, p. 15) pertaining to the quantity of empirical studies and the pragmatic features explored (González-Lloret, 2019; Taguchi, 2015); most of previous studies focused on requests (Cunningham, 2016, 2017; Cunningham & Vyatkina, 2012). Furthermore, existing literature is still inconclusive with mixed results concerning the effect of CMC combined with data-driven instruction on L2 pragmatic competence. The limitations of prior studies' research designs curtailed the extent to which conclusions could be drawn. First, few studies employed a delayed post-test to assess learners' long-term retention of data-driven instruction as well as learned pragmatic knowledge (Fordyce, 2014; Plonsky & Zhang, 2019; Taguchi, 2015). Of the referenced studies, only one study conducted by Li et al. (2018) included a delayed post-test. However, in their study, the two-week interval between the immediate and delayed post-intervention tests was comparatively short. Thus, it is unclear whether CMC paired with data-driven instruction has a longer-term effect on L2 pragmatic development after a longer period of time (e.g., four weeks). Second, existing literature lacks qualitative data reflecting learners' thought processes and pragmatic choices (Nguyen, 2017); most of previous studies adopted quantitative analyses without conducting qualitative analyses (Kakegawa, 2009; Li et al., 2018). Dewaele (2008) pointed out that it is hard for researchers to guess learners' communicative intention solely based on L2 production data and "decide whether a deviation from the target language norm is attributable to gaps in knowledge or to a conscious choice to stick to the first language norm" (p. 254). There is a clear need to include more qualitative analyses (e.g., via retrospective interviews), which can help researchers and instructors establish a deeper insight into "learners' planning and thought processes" (Tateyama, 2001, p. 221). This can further help teachers understand why learners make particular pragmatic choices and the extent to which these choices are related to the provision of instruction (Cunningham, 2016). Thus, instructors can plan or deliver lessons accordingly.

In brief, the mixed results and aforementioned limitations of previous studies present opportunities for further investigations of the influence of CMC coupled with data-driven instruction on L2 pragmatic development. The present study pursued this direction and incorporated delayed post-intervention analysis and qualitative analysis via retrospective interviews. It is anticipated that findings from this study will cast light on the long-term effect of CMC combined with data-driven instruction on L2 pragmatic development and factors that potentially influence learners' pragmatic decision-making. Before focusing on the methodology of the current study, the following segment will succinctly discuss the targeted pragmatic feature, namely compliment responses in Chinese and English.

2.3. Compliment responses in Chinese and English

Compliment responses (CRs) are defined as the hearer's replies to the speaker's positive comments. CRs were chosen as the targeted pragmatic feature in the current study for a number of reasons. One of them is concerning the social functions and importance of CRs to successful intercultural communication (Holmes, 1988). Proper CRs can maintain solidarity, rapport, and harmony among conversational partners (Tang & Zhang, 2009), whereas inappropriate CRs can lead to communication missteps, misunderstandings, or even conflicts (Holmes, 1988). Another reason why this study focused on CRs is that compared to other pragmatic features, CRs are particularly worthwhile investigating because they are prevalent but frequently problematic (Yu, 2003), especially for EFL learners (Golato, 2002). One of the contributing factors is cultural differences, which present a great challenge for EFL learners to appropriately reply to compliments (Cheng, 2011; Tang & Zhang, 2009). Cultural differences in CR behaviors have been noted in cross-cultural studies in Chinese and Australian English (Tang & Zhang, 2009), Chinese and English (Cheng, 2011), and German and American English (Golato, 2002). The appropriate way to handle compliments varies from culture to culture. For instance, EFL learners from Asian countries (e.g., China) may reply to praise differently compared to native speakers of English (Baba, 1996; Chen, 1993; Tran, 2006). Consequently, the cultural differences in responding to compliments may result in misunderstandings and create a barrier to smooth intercultural communication (Holmes, 1988). Moreover, crosslinguistic influence presents another challenge for EFL learners to produce appropriate CRs. Existing literature suggests that when dealing with L2 pragmatics, learners are either inclined to adopt strategies in their first language (L1) or develop their own interlanguage formulas (Ellis, 1994; Kasper & Rose, 2002). Thus, it is worth investigating CRs to help EFL learners respond to praise culturally appropriately and conduct effective intercultural communication in real-world situations.

There is a plethora of research on Chinese EFL learners' CR behaviors (Cai, 2012; Chen, 1993; Cheng, 2011; Tang & Zhang, 2009; Yu, 2003). The three primary CR strategies have been categorized as: accepting, rejecting, and deflecting/evading (Chen, 1993; Chen & Yang, 2010). For example, comparing American English speakers and Chinese EFL learners, Chen (1993) found that Chinese EFL learners were apt to decline compliments, while Americans preferred to accept praise. Chen further explained that Chinese people implemented more "self-praise avoidance strategies" (p. 59) such as the rejecting and deflecting/evading strategies to show modesty, which "enhances their face and self-image" (p. 59). However, in a subsequent study, Chen and Yang (2010) reported Chinese people's more frequent adoption of the accepting strategy than rejections and self-denigrations. Cai (2012) also showed that the accepting strategy was employed more frequently by Chinese speakers than other strategies. Cai suggested that even though Chinese people used to be reluctant to directly accept positive comments owing to their traditional values, they have become more likely to accept compliments because of the impact of Western culture and globalization.

Even though findings from Cai (2012) and Chen and Yang (2010) indicate a shift in CR production among Chinese speakers broadly, Chinese EFL learners still struggle with properly replying to compliments in English. For instance, Cheng (2011) implemented role-play tasks to analyze CR production of native speakers of English and Chinese English language learners. Results showcased that Chinese EFL learners said a simple "thank you" to accept praise in all situations irrespective of context. They had difficulty in utilizing a variety of CR strategies, whereas native speakers of English employed a broad range of strategies in response to positive comments such as the strategy of expressing gladness (e.g., "*Thank you. I am really happy to hear that you liked it.*"). Further, Cheng pointed out that the scarcity of naturalistic input in EFL learners' learning context presented another obstacle for them to reply to compliments felicitously.

Given the complexity of CRs affected by various parameters (e.g., the lack of an authentic L2 environment and different cultural values), CMC combined with data-driven instruction can provide Chinese EFL learners with naturalistic L2 input from native speakers and direct their attention to the nuances of CRs. Moreover, explicit meta-pragmatic information may help students gain more facilities to produce culturally proper CRs in English.

2.4. Research questions

In the context of Chinese university EFL students' CRs, this study compared the effects of two experimental conditions: CMC via Skype and CMC via Skype combined with data-driven instruction. The following research questions guided the present study:

1. Regarding facilitating Chinese EFL learners' appropriate production of CRs, is combining CMC with data-driven instruction more effective than CMC by itself?
2. Does CMC paired with data-driven instruction have a long-term impact on Chinese EFL students' CRs over time?
3. What factors can potentially influence Chinese EFL learners' pragmatic behaviors of producing CRs (as reported in retrospective interviews)?

3. Methodology

This study employed a mixed-methods design by examining quantitative data first and then dissecting qualitative data to further interpret and expand quantitative data (Creswell et al., 2003). To address Research Question 1, this study adopted an experimental research design with two groups, namely an experimental group and a control group, and two instructional interventions. Quantitative data obtaining from the pre-intervention and immediate post-intervention stages were compared to explore the influence of CMC coupled with data-driven instruction on L2 pragmatic competence. To answer Research Question 2, quantitative data from the pre-intervention and delayed post-intervention stages were compared to examine the retention of the instructional intervention. To address Research Question 3, retrospective interviews were carried out with all participants from the experimental group and the

control group to further explain quantitative data and investigate factors that potentially influence EFL learners' pragmatic choices.

3.1. Participants

Fifty-nine individuals (31 females, 28 males) attending a large public university in South China completed this study. They were recruited from an English speaking and listening course for sophomores who were non-English majors. Participants were aged from 19.1 to 22.2 years, with a mean age of 20.2. They were randomly divided into an experimental group and a control group. The experimental group (N = 29, 15 females and 14 males, mean age: 20.1) had text-based CMC interaction via Skype and data-driven instruction in CRs, whereas the control group (N = 30, 16 females and 14 males, mean age: 20.3) had text-based CMC interaction via Skype and regular instruction based on the university's curriculum of the English speaking and listening course. All participants were classified as intermediate-level English learners based upon their scores in the speaking portion of TOEFL (Test of English as a Foreign Language) or IELTS (International English Language Testing System) exams. The selection of intermediate-level English learners is especially apt since instruction in L2 pragmatics is particularly suitable for intermediate-level L2 learners "who have little trouble comprehending and producing L2 but may lack pragmatic form-function mapping" (Taguchi & Roever, 2017, p. 288). By the same token, most of instructional studies of L2 pragmatics recruited intermediate-level L2 learners (Yousefi & Nassaji, 2019). Additionally, a survey conducted prior to the experiment demonstrated that there was no information pertaining to pragmatics generally or the targeted pragmatic feature (i.e., CRs) in the learners' English coursebooks or supplementary materials. The survey also showcased that none of the learners had experience of living in an English-speaking country before.

Two instructional sessions were delivered by the researcher, who also conducted the retrospective interviews. One female native speaker of American English (age: 21.6 years) participated in the current study as an interlocutor during the CMC interaction. She was a Linguistics major with three years of EFL teaching experience. All participants chatted with the interlocutor individually via text messages on Skype over three sessions. All conversation topics were selected from participants' textbooks (see Table 1). Across the three chat sessions, the native speaker of English used different Skype account names to appear as three different individuals to minimize the potential influence of familiarity on participants' pragmatic behaviors.

3.1.1. Materials

For the experimental group, the main instructional materials consisted of two handouts. The purpose of the first handout (see Appendix A) was to raise learners' awareness of the targeted pragmatic feature. This handout comprised four pairs of mini dialogues (extracted from the pre-intervention chat texts). Each pair contained an appropriate CR and a less appropriate one. The context of each pair of conversations incorporated one of the four most frequent situations for people to give positive comments in Chinese and English: appearance/clothing, ability/work, personality, and possessions (Chen, 1993; Holmes & Brown, 1987). All CRs were highlighted in bold.

To provide explicit meta-pragmatic explanations for the experimental group, the second handout (see Appendix B) focusing on CR strategies was provided. This handout listed 13 CR sub-strategies under the three categories of accepting, evading/deflecting, and rejecting (Chen, 1993; Chen & Yang, 2010). Each sub-strategy was accompanied by one or two examples.

3.2. Procedures

There were five stages in total (see Table 2): Week 1: preparation; Week 2: pre-intervention; Week 3: the experimental group: data-driven instruction, the control group: regular instruction based on the university's curriculum of the English speaking and listening course; Week 4: immediate post-intervention; Week 8: delayed post-intervention.

3.2.1. Preparation

The researcher provided training for the interlocutor germane to detailed procedures for the task and techniques for providing four positive comments naturally during each chat (one compliment on each of these four facets: appearance/clothing, ability/work, personality, and possessions). Additionally, each student chose a weekly 30-min time slot to interact with the interlocutor. Students conversed with her individually over Skype at the designated time. They were also told to prepare three digital photos which aligned with the three conversation themes. During each chat session, they shared with the interlocutor one photo closely related to the topic. For instance, when the theme was focused on hobbies, the student might upload a photo where he or she was painting. The purpose of bringing photos is to provide talking points and help the interlocutor naturally pay four compliments (as described above) to the student throughout each conversation. For example, the interlocutor may compliment the student on his or her clothing or possessions based on the photo.

Table 1
Conversation themes.

Chat Session	Chat 1	Chat 2	Chat 3
Theme	Hobbies	Travel	College Life

Table 2
Timeline for the experimental group.

Stage	Week	Length	Content
1. Preparation stage	Week 1	120 min	Orientation for the interlocutor
2. Pre-intervention stage			
Chat 1	Week 2	30 min	A text-based chat on Skype
3. Intervention stage: Data-driven instruction	Week 3 (Thursday)	90 min	In the classroom: consciousness-raising activities; meta-pragmatic explanations; production practices; corrective feedback; and discussion.
	Week 3 (Friday)	90 min	In the classroom: review; reinforcement exercises; corrective feedback; and real-life practice.
4. Immediate post-intervention stage			
Chat 2	Week 4	30 min	A text-based chat on Skype
5. Delayed post-intervention stage			
Chat 3	Week 8	30 min	A text-based chat on Skype
Retrospective interviews	Week 8 (Immediately after Chat 3)	50 min	Face-to-face

3.2.2. Pre-intervention

During Week 2, participants in both groups had text-based chats with the interlocutor (appearing as three different individuals) via Skype for 30 min, focusing on one of the selected topics. The interlocutor was asked to initiate each chat and pay four positive comments to each student throughout the conversation as naturally as possible. She was also asked to naturally respond to any praise that she may receive from learners.

3.2.3. Instructional intervention

The experimental group received two sessions of data-driven instruction which took place in the classroom on Thursday and Friday during Week 3, whereas the control group received two sessions of regular instruction based on the university's curriculum of the English speaking and listening course. Each instructional session lasted for 90 min. The two sessions of data-driven instruction were designed according to the guidelines in Taguchi's (2015) review regarding conducting instructional studies of L2 pragmatics. She proposed seven chief components in an intervention, encompassing consciousness-raising activities, meta-pragmatic explanations, input, input enhancement, production, corrective feedback, and discussion. Data-driven instruction in this study incorporated all of the seven elements. Specifically, during the first data-driven instruction session, (1) participants were given the first handout (see Appendix A) during the **consciousness-raising activity**. They were asked to compare four pairs of mini dialogues entailing appropriate and less appropriate CRs, which were from the interlocutor and learners' production of appropriate and less appropriate CRs at the pre-intervention stage. All CRs were highlighted in bold (**input & input enhancement**). Then, learners circled the more appropriate examples. The objective of the first step was to raise EFL learners' awareness of the targeted pragmatic feature. (2) The teacher provided the experimental group with explicit **meta-pragmatic information and explanations** regarding the proper usage and social functions of CRs in English. A handout encompassing CR strategies with examples was also provided to learners (see Appendix B). (3) The class **discussed** cultural differences concerning CRs in Chinese and American culture. (4) Then, participants **worked in pairs and did role-plays to practice** offering and responding to positive comments. (5) During group work, the instructor circulated in the classroom and provided **corrective feedback** for each group concerning inappropriate CRs. (6) Lastly, each pair **acted out their role-plays** in front of the class.

The second data-driven instruction session focused on reinforcing what participants learned in the first session. After the instructor reviewed the previous session regarding CR strategies, the participants analyzed more examples of appropriate and inappropriate CRs from the pre-intervention data. Then, they modified the inappropriate responses. After that, learners **worked in pairs** and provided rationales for the revised CRs. Additionally, the instructor circulated in the classroom and provided **corrective feedback** for each group regarding inappropriate CRs. Finally, each participant took turns and **practiced** CRs in front of the class with one of the two invited guests who were American exchange students studying at the same university.

3.2.4. Immediate post-intervention

This stage was conducted during the week following the instruction. The two groups continued to perform the written CMC tasks during Week 4.

3.2.5. Delayed post-intervention

To examine the retention of the data-driven instruction, one month after the immediate post-intervention stage, the two groups performed the online chat tasks during Week 8. Additionally, retrospective interviews with all participants from the experimental group and the control group were carried out immediately after the delayed post-intervention online chat.

4. Data collection

4.1. Naturally occurring conversations

This study uses naturally occurring conversations via SCMC to collect quantitative data. "Naturalistic data are desirable in the study of pragmatics" (Nguyen, 2019, p. 196), because they "best reveal language use and where two-way communication occurs, interaction and effect on participants as well" (Bardovi-Harlig, 2010, p. 242). Moreover, as a convenient source of data, naturally occurring conversations via CMC are digitally recorded and instantly available for analysis.

Specifically, in this study, each text-based chat session was carried out via Skype once a week outside of class for 30 min. Each chat focused on one of the selected topics. The interlocutor was told to initiate each conversation and provide four compliments for each participant throughout the chat as naturally as possible. Therefore, each learner would produce a total of four CRs in the pre-intervention, immediate post-intervention, and delayed post-intervention data, respectively. The native English speaker was also asked to naturally reply to any praise that she may receive from learners. One thing worth mentioning was that the interlocutor was not informed of any information regarding the instructional intervention (e.g., CR strategies) to assure the authenticity of the input that she provided for students. Texts were saved promptly at the end of each online chat session.

4.2. Retrospective interviews

Retrospective interviews are often utilized alongside performance data (Nguyen, 2019), and they are very useful in revealing how L2 learners make specific pragmatic choices and the cognitive processes of their decision-making (Nguyen, 2019; Ren, 2014; Taguchi et al., 2016). Furthermore, retrospective interviews are particularly suitable for this study in that they can help researchers avoid making false inferences regarding what factors can affect the observed pragmatic behaviors (Nguyen, 2017; Robinson, 1992) to guarantee the validity of findings (Duff, 2008). Finally, there has been a dearth of qualitative analyses regarding instructional studies of L2 pragmatics, with most of them conducting quantitative analyses (Nguyen, 2017).

Specifically, in this study, retrospective interviews with all participants from the experimental group and the control group were conducted immediately after the delayed post-intervention chat. The interviews were semi-structured (see Appendix C). Screenshot pictures of certain text chats were shown to learners to refresh their memories (Nguyen, 2019). Interviews were conducted in the students' native language to minimize any ambiguity (Gass & Mackey, 2015) and potential cognitive load resulting from "translating their thoughts from L1 to L2" (Nguyen, 2019, p. 205). Each interview was recorded and transcribed.

5. Data analysis

5.1. Quantitative data analysis

The dataset included a total of 651 CRs obtaining from the two groups' production of CRs at the pre-intervention, immediate post-intervention, and delayed post-intervention stages. Among the 651 CRs, 329 of them were produced by the experimental group, and 322 of them were produced by the control group. Based on the taxonomy of CR strategies in the studies conducted by Chen (1993) and Chen and Yang (2010), all CRs in the current study were first coded for 13 sub-strategies under three broad categories (see Appendix B): (1) accepting (e.g., 'Thank you. I am glad that you liked it.'), (2) deflecting/evading (e.g., 'Really?'), and (3) rejecting (e.g., 'No. I don't think so.'). To assess participants' CRs, a five-level instrument (see Table 3) was created according to how to design rubrics to assess pragmatics proposed by Ishihara (2010). This rubric was also discussed with another instructor who had five years of EFL teaching experience and was tested with a pilot study. Two measures were analyzed in this study, including appropriateness and the variety of CR sub-strategies that were adopted. Data were coded independently and scored by two raters who were native English speakers with Ph.D. degrees in Linguistics. They went through a process of training, discussion, and norming to establish reliability and consistency in the assessment of CRs. Inter-rater reliability was high for all phases: pre-instruction data ($r = 0.86$); immediate post-instruction data ($r = 0.89$); and delayed post-instruction data ($r = 0.91$). The average scores between the two raters were utilized for data analyses. Additionally, the raters were blinded regarding the experimental condition (i.e., the experimental group versus the control group) to minimize inadvertent rater bias (Gass & Mackey, 2015).

To address Research Question 1, independent samples *t*-tests were conducted to examine the between-group differences at the immediate post-intervention stage. Cohen's *d* was utilized to calculate the effect size of the significant difference (small = .2; medium

Table 3
Rubric for rating CRs.

Ratings	Criteria: Appropriateness & Variety
4 Excellent	-The student produces **an appropriate compliment response by adopting the thanking strategy**; -The student **employs at least one sub-strategy under the accepting category** (e.g., explaining, expressing gladness, agreeing).
3 Good	-The student produces **an appropriate compliment response by adopting the thanking strategy**; -The student **does not employ a sub-strategy under the accepting category** (e.g., explaining, expressing gladness, agreeing).
2 Fair	-The student produces **a somewhat inappropriate** compliment response by adopting the deflecting/evading strategy.
1 Poor	-The student produces **an inappropriate** compliment response by adopting the rejecting strategy.
0 No response	The student **does not respond** to a compliment.

= 0.5; large = 0.8) (Cohen, 1992, 1998). To answer Research Question 2, paired-samples *t*-tests were carried out to investigate the differences within each group at different times (i.e., the pre-intervention stage and the delayed post-intervention stage). Cohen's *d* was also used to assess the effect size of the significant difference. Moreover, an independent samples *t*-test was conducted to see whether there was a significant difference in the delayed post-intervention mean scores between the experimental group and the control group. Cohen's *d* was used to evaluate the effect size of the significant difference.

5.2. Qualitative data analysis

To address Research Question 3, qualitative data from retrospective interviews with all participants from the two groups were transcribed and coded thematically (Miles & Huberman, 1994). First, retrospective interviews were transcribed verbatim and subsequently translated into English versions. After that, all English versions were returned to participants to see whether the translations accurately reflected their thoughts. Then, data were analyzed inductively (Strauss & Corbin, 1998). Two trained raters holding Ph.D. degrees in Linguistics read and re-read the statistics separately to identify emerging themes, which were subsequently compared and juxtaposed both across and within the experimental group and the control group to reveal any commonalities and differences (Merriam, 1998). This process was conducted iteratively until the themes were exhausted. To increase the coding reliability, the raters jointly compared the themes, and their coding agreement reached 92%. When disagreements occurred, they recoded and re-analyzed the data until they either identified new themes or removed the controversial ones. Thus, three themes emerged from the retrospective interviews, including L2 pragmatic knowledge, crosslinguistic influence, and online processing difficulties. The themes with selected examples are demonstrated in Table 4.

6. Results and discussion

Before learners' CR behaviors were dissected, the interlocutor's dataset was examined. The average frequency of the positive comments provided by her was the same for both groups; she provided each participant with four compliments during each chat session. Thus, the impact of the interlocutor on participants' production of CRs was minimized.

Moreover, a preliminary analysis of the pre-intervention data was conducted to check whether the two groups were comparable at the pre-instruction stage. Results from an independent samples *t*-test demonstrated no significant difference in the CR production between the experimental group (M = 2.63, SD = 0.69) and the control group (M = 2.65, SD = 0.66), t (57) = 1.325, p = .162 prior to the instructional intervention.

6.1. Quantitative data

The first research question was regarding these two conditions: CMC by itself at the pre-intervention stage versus CMC combined with data-driven instruction at the immediate post-intervention stage. Fig. 1 presents mean scores at all three stages for the two groups. To answer Research Question 1, results from an independent samples *t*-test revealed that there was a significant difference in the immediate post-intervention mean scores between the experimental group (M = 3.93, SD = 0.23) and the control group (M = 2.71, SD = 0.73), t (57) = 4.521, p = .025. The effect size was medium (Cohen's d = 0.5316). These results suggested that compared to the control group, the experimental group who received data-driven instruction made significantly more progress on replying to compliments pertaining to appropriateness and the variety of CR sub-strategies employed. This finding is in alignment with prior studies revealing that CMC paired with data-driven instruction has a positive effect on L2 pragmatic competence (Cunningham & Vyatkina, 2012; Kakegawa, 2009; Sardegna & Molle, 2010). The instructional intervention not only made the targeted pragmatic feature (i.e., CRs) more salient (Taguchi, 2015) but also provided EFL learners with more L2 pragmatic knowledge. Specifically, the awareness-raising activities, such as the crosslinguistic comparisons and form-comparison tasks, helped students pay attention to the appropriate and less inappropriate usage of CRs. These exercises also helped them notice and understand the cultural differences in replying to praise. Thus, the awareness that the experimental group cultivated from these activities led to the subsequent intake of CRs at the immediate post-intervention stage. Additionally, explicit meta-pragmatic explanations regarding the three main CR strategies and 13 sub-strategies helped learners understand how to reply to praise more properly. Furthermore, these findings provide clear support for the significance of noticing and understanding in L2 pragmatic development (Schmidt, 1993, 2001); noticing is a requisite for L2 acquisition and understanding has a facilitative effect on promoting L2 pragmatic competence.

The second research question was regarding the long-term effect of CMC coupled with data-driven instruction on L2 pragmatic development. Results from paired samples *t*-tests demonstrated that the experimental group produced significantly more proper CRs at

Table 4
Themes from retrospective interviews and selected examples.

Themes	Examples
L2 pragmatic knowledge	"Saying 'thank you' is the only response that I know in terms of responding to praise in English."
Crosslinguistic influence	"When people compliment me in English, I immediately say 'so-so' as a response. 'So-so' means '一般' in Mandarin. I always say '一般' when responding to compliments in Chinese."
Online processing difficulties	"I was so focused on more important things, like constructing grammatical sentences, that I did not pay attention to smaller things like responding to praise."

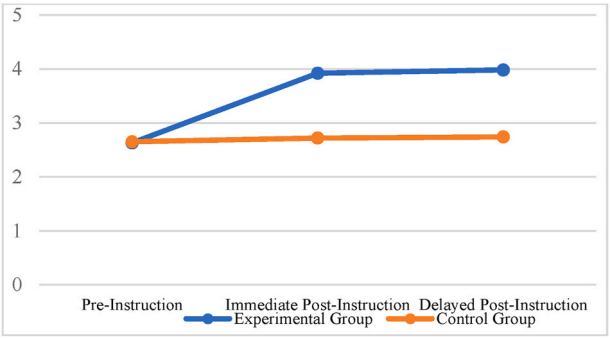

Fig. 1. Mean scores at the three stages for the two groups.

the delayed post-intervention stage (M = 3.98, SD = 0.10) than the pre-instruction stage (M = 2.63, SD = 0.69), t (28) = 4.211, $p <$ .001 with a medium effect size (d = 0.5231). However, there was no significant difference pertaining to the control group's performance between the delayed post-intervention stage (M = 2.74, SD = 0.71) and the pre-intervention stage (M = 2.65, SD = 0.66), t (29) = 1.209, p = .182 (see Fig. 1). Moreover, results from an independent samples t-test revealed that there was a significant difference in the delayed post-intervention mean scores between the experimental group (M = 3.98, SD = 0.10) and the control group (M = 2.74, SD = 0.71), t (57) = 4.519, p = .022. The effect size was medium (Cohen's d = 0.5329). These results demonstrated a lasting effect of data-driven instruction on the experimental group's L2 pragmatic development. Awareness-raising activities and meta-pragmatic explanations were successful in turning noticing into understanding (Schmidt, 1993) and converting initial representations of form-meaning-context mappings into long-term memory, which leads to automatization and proceduralization (Li, 2012) of CR production and retention of knowledge (Taguchi, 2015) for the experimental group at the delayed post-intervention stage. In addition, another factor that may be attributed to the lasting effect of the intervention is the nature of compliment responses. It is relatively easy for learners to remember acceptance strategies for a longer period of time since they contain less complex structures. In contrast, pragmatic features with more complicated structures, for example, requests, are typically more difficult for learners to master since the appropriateness of requesting behaviors needs to be achieved through multiple dimensions, for example, indirectness, external modification, and internal modification (Cunningham, 2017). Consequently, such a durable effect was observed for CRs. In short, these findings fill the lacuna in the existing literature and enrich our understanding of the long-term effectiveness of CMC paired with data-driven instruction on L2 pragmatic development.

Further analysis of the quantitative data revealed that both groups adopted the acceptance strategy more frequently than the other two strategies at the pre-intervention, immediate post-intervention, and delayed post-intervention stages (see Figs. 2 and 3). In particular, after the intervention, the percentage of the acceptance strategy adopted by the experimental group increased from 45% at the pre-instruction stage to 92% at the immediate post-instruction stage, whereas the percentages of the accepting strategy used by the control group at these two stages did not change much. These results indicated the effectiveness of data-driven instruction, which helped the experimental group produce more appropriate CRs by adopting the accepting strategy.

One thing worth noting was that the way in which the experimental group and the control group implemented the accepting strategy differed. The experimental group's mean score (M = 3.93) at the immediate post-intervention stage was significantly higher (p = .025) than the control group's mean score (M = 2.71), indicating that the experimental group not only generated more felicitous CRs by using the thanking strategy at first but employed a wider variety of sub-strategies under the accepting category (e.g., explaining), whereas the control group heavily relied on the thanking strategy by providing a simple CR with "thanks" or "thank you". This finding is consistent with Cheng's (2011) research indicating that Chinese EFL learners struggle with implementing a broad range of CR strategies, whereas native speakers of English employ an assortment of CR strategies in real-life communication. After data-driven instruction, the meta-pragmatic explanations helped the experimental group get acquainted with various CR sub-strategies and later become more sophisticated in using them.

In summary, learners who had CMC combined with data-driven instruction produced more appropriate CRs and adopted a wider variety of CR sub-strategies. This finding aligns with previous studies demonstrating the positive effect of the pairing of CMC and data-

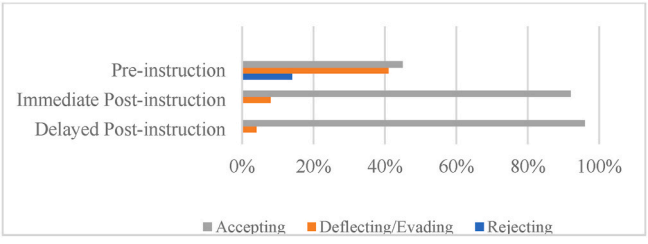

Fig. 2. Percentages of CR strategies used by the experimental group.

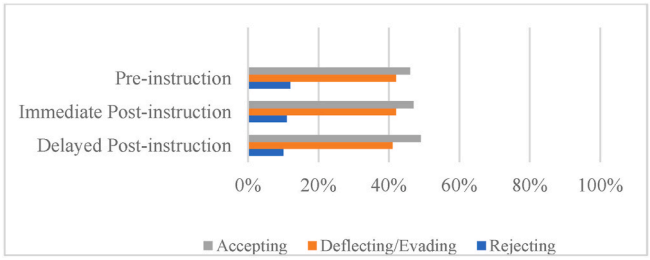

Fig. 3. Percentages of CR strategies used by the control group.

driven instruction on L2 pragmatic competence (Cunningham & Vyatkina, 2012; Kakegawa, 2009; Sardegna & Molle, 2010). The finding also corroborates Schmidt's (1993, 2001) noticing hypothesis stating that awareness-raising activities and meta-pragmatic information are facilitative in enhancing L2 pragmatic competence. Further, the finding regarding the long-term effect on L2 pragmatic development demonstrates the robustness of the instructional intervention.

6.2. Qualitative data

The third research question investigated what factors can influence EFL learners' pragmatic behaviors of CRs. Qualitative data from retrospective interviews with the experimental group and the control group were organized thematically under three categories: L2 pragmatic knowledge, crosslinguistic influence, and online processing difficulties. All interviewees were assigned pseudonyms (see Appendix D).

6.2.1. L2 pragmatic knowledge

Almost three-fourths of the participants from the experimental group and four-fifths of the students from the control group admitted that they lacked L2 pragmatic knowledge concerning CR strategies. This could explicate their predominant usage of a simple "thanks" or "thank you" especially in the pre-intervention phase. For instance, Matthew from the experimental group said, "*When it comes to responding to praise, 'thank you' is the only compliment response that I know.*" Melissa from the control group also commented on her lack of L2 pragmatic knowledge regarding replying to compliments. She reported, *"Previously, my immediate reaction was to say 'thanks' when I received a positive comment. I did not know other ways to reply to a compliment."* This finding echoes Cheng's (2011) argument that Chinese EFL learners tend to employ the simple "thanking" strategy instead of adopting various CR strategies like native English speakers (e.g., the strategy of explaining). Learners also commented further on the latent harm of having deficient L2 pragmatic knowledge. Janet said, "*Prior to the instruction, I didn't know any of the compliment response strategies except the 'thanking' one. I think that it is highly necessary for EFL learners to be equipped with this type of knowledge. Otherwise, native English speakers will think that I am impolite or unfriendly*."

One thing worth mentioning is that one-third of the participants from the control group expressed confusion regarding how to reply to praise in English. Vincent stated, "*I feel really confused about whether to accept a compliment. If I accept the praise, would I appear arrogant or not humble? If I reject the compliment, would I seem rude? I wish my teachers could cover topics like this in the future.*" In comparison, three-fourths of the interviewees from the experimental group expressed their confidence in replying to praise in English and the beneficial effects of the instructional intervention. As Zoe said, "*After taking the two sessions about compliment responses, I have gained more knowledge and confidence in properly responding to praise in English. I have realized that although declining a compliment is traditionally considered humble in Chinese culture, it is appropriate to accept praise in English, which is deemed polite.*"

These comments underscore the importance of explicit meta-pragmatic explanations, which can acquaint learners with more L2 pragmatic knowledge and facilitate their comprehension and mastery of the pragmatic feature (Schmidt, 2001; Taguchi, 2015).

6.2.2. Crosslinguistic influence

This category is closely related to L2 pragmatic knowledge. It is due to learners' limited L2 pragmatic knowledge that they may utilize routines or norms in their L1 pragmatics and then transfer them to L2. For example, the rejecting and evading CR strategies that Chinese EFL learners employ are the traditional ways to reply to compliments in Chinese to show humility. About 41% of the interviewees from the experimental group and 62% of the participants from the control group hinted that their L1 had an influence on the way they replied to praise, especially before data-driven instruction. Examples from the interview data are provided below.

> *It is customary to decline a compliment in Chinese culture. Not accepting praise shows your modesty and humility. Therefore, whenever people praise me in English, I always adopt this "humble" strategy. I didn't realize that this behavior was regarded inappropriate in English until I had the two lessons centering on compliment responses.*
>
> (Emily)
>
> *When people compliment me in English, my default response is 'so-so', meaning '一般' in Mandarin. It is a common formulaic expression in Mandarin Chinese for responding to praise.* (Andrew)

The example data above can be classified into two categories of communication transfer that Ellis (1994) propounded, namely

strategic transfer and automatic translation. Emily's comment falls under the category of strategic transfer, referring to learners' dependence on their L1 for the production and comprehension of L2 in a specific context without being cognizant of "non--transferability" (p. 338) of the feature. Learners resorted to their understanding of CRs in their L1 and adopted the way how they typically replied to praise in Chinese to respond to positive comments in English. This finding is consistent with previous studies (Ellis, 1994; Kasper & Rose, 2002), showing that when dealing with L2 pragmatics, learners tend to adopt strategies in their L1. Andrew's response, however, can be classified as automatic translation, which appears when automatized and fixed L1 norms surpass the awareness of non-transferability (Ellis, 1994). Andrew translated the formulaic phrase "一般" (meaning "average" and implying that "I'm just ordinary.") into English to respond to praise.

Additionally, four interviewees from the experimental group and three students from the control group commented on the usefulness of having CMC related to crosslinguistic influence. Joseph said, "*I really enjoyed chatting with the native English speakers on Skype. By conversing with them, I learned what to say when people praise me in English. During our weekly chat, I noticed that when I complimented them, they would say 'Thank you!' as a response rather than saying 'No, I'm not that good.', which I normally tended to use.*" Participants from the experimental group commented further on the benefits of data-driven instruction in relation to crosslinguistic influence. Victoria said, "*The teacher asked us to compare the cultural differences of CRs in Mandarin and English. I realized that using the Chinese way to reply to praise in English is inappropriate*." These types of comments corroborate Schmidt's (1993, 2001) noticing hypothesis by demonstrating that consciousness-raising activities such as form-comparison tasks and crosslinguistic comparisons can help learners notice and understand the potential influence of L1 on their L2 pragmatic behaviors. They also further consolidate the vital role of the combination of data-driven instruction and CMC in L2 pragmatic development.

6.2.3. Online processing difficulties

Five of the interviewees from the experimental group implied that they had difficulty in processing information in L2, and even more participants (i.e., 11 students) from the control group expressed the same challenge. Several interviewees mentioned that they sometimes neglected certain things that were said by the interlocutor. For example, Michael said, "*I was so focused on more important things, like organizing grammatical sentences and answering the interlocutor's questions, that I did not pay attention to smaller things like responding to praise.*" Based on this comment, the researcher took a closer look at Michael's pre-intervention online chat. The following excerpt illustrates the online processing difficulty that he indicated.

Interlocutor: *What did you do over the weekend?*

Michael: *I took a photography class on Saturday.*

Interlocutor: *Nice! I loved the pictures that you sent to me. You are really good at taking photos!*

Michael: *Thanks. I played basketball on Sunday.*

In this sample, Michael said "thanks" to reply to the praise and immediately went back to answering the question that the interlocutor asked earlier. Processing pressure from online speech production could affect L2 learners' cognitive control of attention (Miyake et al., 2000). They may use inhibitory control by neglecting distracting information to complete more important tasks (Green, 1998). Consequently, Michael tended to perform "the more important task" (e.g., answering the interlocutor's questions) by not paying much attention to appropriately responding to a compliment (e.g., returning a compliment to the interlocuter after saying "thanks"). Later in the interview with Michael, he commented, "*Because I learned the compliment response strategies and did role-plays in class, now I don't feel overwhelmed and can reply to compliments in English more at ease*." On the other hand, many participants from the control group still focused all their energy on the grammaticality rather than appropriateness of their sentences. As Tim stated, "*When I express ideas in English, I only pay attention to grammar. Honestly, I didn't even notice that I was being complimented by the native English speaker during our chats.*" These findings indicate that data-driven instruction containing explicit explanations of CR strategies and communicative activities can familiarize learners with the targeted pragmatic feature and thus reduce the online processing load in real-life interactions. (Schmidt, 1993, 2001; Taguchi, 2015).

As demonstrated in the analysis above, a multitude of factors can influence EFL learners' pragmatic choices (e.g., limited L2 pragmatic knowledge, crosslinguistic influence, online processing difficulties). These factors may explicate the infelicitous or less felicitous CRs in the quantitative data. This finding further suggests that data-driven instruction is conducive to L2 pragmatic development. Awareness-raising activities and meta-pragmatic explanations can help learners obtain more L2 pragmatic knowledge, diminish the potential influence of L1 on L2, and lessen online processing difficulties (Schmidt, 1993, 2001). Moreover, this finding can help researchers and instructors better understand L2 learners' pragmatic decision-making. Hence, this qualitative analysis lends further support to the positive effect of CMC combined with data-driven instruction on L2 pragmatic competence in existing literature (Cunningham & Vyatkina, 2012; Kakegawa, 2009; Sardegna & Molle, 2010).

7. Conclusions and implications

This mixed-methods study investigated whether CMC coupled with data-driven instruction was more effective than CMC by itself in facilitating EFL learners' CRs. Findings from quantitative and qualitative data collectively suggest that this combination not only is more effective than CMC by itself but has a long-term influence on L2 pragmatic development. Appropriately responding to compliments warrants not only an authentic L2 environment but data-driven instruction in the targeted pragmatic feature. This study builds on previous CMC-based interventional studies of L2 pragmatics (Cunningham & Vyatkina, 2012; Sardegna & Molle, 2010; Sykes, 2013), revealing the positive influence of CMC combined with data-driven instruction on L2 pragmatic competence.

Furthermore, this study fills the gap in existing literature by shedding light on the durable effect of CMC paired with data-driven instruction and the cognitive processes of learners' L2 pragmatic decision-making. Additionally, the study corroborates Schmidt's (1993, 2001) noticing hypothesis regarding the benefits of awareness-raising activities and meta-pragmatic explanations.

There are some limitations of the study. For example, the improvements that the experimental group made at the immediate post-intervention stage could be attributed to more time they spent practicing CRs during data-driven instruction. To address this, future studies might need to consider incorporating CR exercises for the control group during their regular instruction, which can further clarify the role of data-driven instruction in developing L2 pragmatic competence. Future work will also need to incorporate a larger sample size. Moreover, to further investigate the relationship between CMC and data-driven instruction for promoting L2 pragmatic development, more future studies are expected to investigate a wider range of target languages (e.g., Mandarin, Korean, and French) and expand the range of exploration to other pragmatic features (e.g., humor) instead of limiting investigation to speech acts. In addition, augmenting the theoretical scope by adopting different guiding frameworks (e.g., Skill Acquisition Theory) for instruction in L2 pragmatics calls for future research.

The implications of the current study are relevant for instructors in similar contexts; the study provides useful suggestions concerning instruction in L2 pragmatics for EFL teachers who lack a naturalistic L2 environment. The successful application of CMC coupled with data-driven instruction provides further empirical support for this combination's applicability and effectiveness as a pedagogical affordance. Thus, to help learners foster their L2 pragmatic development, the findings from the current research suggest that EFL instructors should incorporate CMC and data-driven instruction into real-life teaching. Specifically, teachers should create more telecollaborative opportunities for students to have CMC interactions with native speakers, for instance, collaborating with overseas institutions and having biweekly CMC interactions via web conferences or emails. Moreover, it is crucial for EFL teachers to raise learners' pragmatic awareness through consciousness-raising activities, equip them with explicit meta-pragmatic information, and familiarize them with the targeted pragmatic feature through communicative activities.

In conclusion, collaborative efforts of both researchers and instructors are needed to establish effective instructional conditions, which can ultimately foster learners' L2 pragmatic development and help them conduct appropriate intercultural communication.

Declaration of competing interest

The author declares none.

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Appendix A

First Handout for the Experimental Group: Awareness-Raising Activities

Look at the following four pairs of mini dialogues and circle the more appropriate compliment responses.
I. Appearance/Clothing.
Scenario 1:
A: I really like the picture that you shared with me! I love the color of your shirt!
B: **It's an old shirt.**
Scenario 2:
A: I love this picture! I really like the color of your hat!
B: **Thank you. My best friend gave it to me on my birthday.**
II. Personality.
Scenario 1:
A: Wow! You have adopted many street dogs! You are such a kind person!
B: **Thank you. You are a very kind person, too!**
Scenario 2:
A: I love the story that you shared with me. I can tell that you have a great sense of humor!
B: **Thanks.**
III. Ability/Work.
Scenario 1:
A: Thank you for sharing these pictures with me. You are really good at taking photos!
B: **No, no. I'm not that good.**
Scenario 2:
A: You are such a great storyteller! I love the story that you shared with me!
B: **Thank you. I'm glad that you enjoyed my story.**
IV. Possessions.

Scenario 1:
A: Wow, congratulations on winning the first prize in the swimming competition! Look at your gold medal! That is so phenomenal!
B: **Thank you very much. I practiced swimming every morning to prepare for that competition.**
Scenario 2:
A: I love the camera that you were holding in that photo! It looks so cool!
B: **I don't think so. That camera actually has many problems.**

Appendix B

Compliment Response Strategies

I. The Accepting Category.
Sub-strategy 1: Thanking.
Examples: 'Thank you!'
Sub-strategy 2: Agreeing.
Examples: 'Yeah, I like this backpack, too.'
Sub-strategy 3: Expressing gladness.
Example: 'I am happy to hear that you enjoyed reading my book.'
Sub-strategy 4: Returning.
Example: 'Your sunglasses look stylish, too.'
Sub-strategy 5: Encouraging.
Example: 'I am certain that your performance will be phenomenal, too.'
Sub-strategy 6: Explaining.
Example: 'It was a graduation present from my parents.'
II. The Deflecting/Evading Category.
Sub-strategy 7: Offering.
Example: 'You can have this pencil if you want.'
Sub-strategy 8: Joking.
Example: 'I make everything look amazing, right?'
Sub-strategy 9: Questioning or doubting.
Example: 'Are you sure?'
Sub-strategy 10: Deflecting/evading and explaining.
Example: 'Actually, it's a second-hand watch. I purchased it at a thrift store.'
III. The Rejecting Category.
Sub-strategy 11: Disagreeing.
Examples: 'Well, I don't think so.'
Sub-strategy 12: Denigrating.
Example: 'No. This CD player has many problems.'
Sub-strategy 13: Rejecting and explaining.
Example: 'I am not sure about that. The texture of this sweater is not as soft as I expected.'

Appendix C

Questions for Retrospective Interviews

1. Would you like to describe your experience of taking part in this experiment? For instance, what did you take away from this experience?
你能描述一下参加这个实验的感受吗？比如说，你有哪些收获？
2. How would you describe your experience of chatting with native English speakers via Skype in this experiment? Did you find conversing with them was helpful in terms of improving your English?
可以描述一下你用Skype和对方用英语聊天的感受吗？你觉得这种方式对提高你的英文有帮助吗？
3. For the experimental group: Did you find the teacher's instruction in compliment responses helpful? If so, why?
关于如何用英语得体地回复赞美，你觉得老师的课堂讲解对你有帮助吗？如果有，为什么？
4. Have you learned things like how to reply to a compliment in your English textbooks or from your instructors previously?
在你的英文教材里或者过去的英语课上，有没有涵盖类似如何回复别人的夸奖这样的内容呢？
5. In your opinion, is it necessary to incorporate content like how to appropriately respond to compliments into the curriculum?
你觉得有没有必要把像如何得体地回复他人的称赞这样的内容加入到英语课程中呢？
6. How do you feel when people give you compliments? Do you feel happy, shy, or embarrassed?
当别人称赞你的时候，你有什么感受？你会感到高兴、害羞 、还是尴尬呢？

7. Typically, how do you respond to a positive comment in Mandarin Chinese? Do you use the same way to reply to praise in English?

通常情况下，当别人用中文称赞了你，你会说些什么？你会用同样的方式来回复英文的赞美吗？

8. In your eyes, why is it challenging for some Chinese EFL students to properly respond to praise in English?

对于一些中国同学来说,为什么用英文得体地回复对方的夸奖会有一定难度呢？

9. Is there anything else that you would like to add?

你有什么想要补充的吗？

Appendix D

Pseudonyms of Participants during Retrospective Interviews.

Pseudonym	Group	Gender	Age
Andrew	The control group	Male	19.2
Emily	The experimental group	Female	20.1
Janet	The experimental group	Female	21.2
Joseph	The control group	Male	19.5
Matthew	The experimental group	Male	20.4
Melissa	The control group	Female	20.2
Michael	The experimental group	Male	20.5
Tim	The control group	Male	21.2
Victoria	The experimental group	Female	21.9
Vincent	The control group	Male	20.6
Zoe	The experimental group	Female	19.9

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