The affordances of WeChat Voice Messaging for Chinese EFL learners during private tutoring

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Abstract

Despite an increasing amount of research on Mobile Assisted Language Learning (MALL) in classroom settings within the Chinese EFL context, less is known about how learners engage with MALL outside of the classroom. In particular, few studies have explored the impact of voice-message-assisted Synchronous Computer-Mediated Communication (SCMC) for language learning, where students combine text input with a variety of voice messaging functions to create an immersive communication platform for L2 acquisition. Focusing on the use of the popular WeChat messaging platform and its affordances for the development of L2 English pronunciation and fluency, a mixed-methods approach combining questionnaire data (n=50), interview data (n=5), and case study data comprised of learners' WeChat logs taken at 30-hour intervals was adopted. The findings suggest this approach to L2 learning was viewed favourably by the Chinese adult English learners taking private tutorial lessons in this study, given the relaxation of temporal and geographic boundaries for communication. In addition, the various functions of WeChat voice messaging (e.g. message cancelling, 60-second time limit) were each found to have an important role to play in learners' monitoring and restructuring of their L2 production.

Keywords: WeChat, Voice messaging, MALL, SCMC, L2 pronunciation, Chinese L2 English learners

Introduction

China boasts the largest number of English learners in the world, totaling over 390 million people. However, despite the ostensibly high demand for competent English skills in China, only 5% of Chinese EFL learners claim they can fluently communicate in English (Wei & Su, 2012). Accordingly, in addition to studying English at public schools and universities, a large number of Chinese EFL learners enroll in private English tutorials in the hope of enhancing their English performance, albeit with generally poor results (Bolton & Graddol, 2012). One main reason ascribed to Chinese students' suboptimal performance in English is limited communicative exposure to English in Chinese society. Despite its popularity as a foreign language, China is in the 'expanding circle' of the three-stage concentric circle as conceived by Kachru (1989), where English

plays no official governmental or communicative role in society, therefore, it is difficult for Chinese EFL learners to access an immersive English language environment within China's borders, and the focus on reading and listening in the target language in classroom contexts tends to result in poor oral communicative performance (Shi et al., 2017). In particular, Chinese adult learners find speaking English with intelligible pronunciation and fluency very challenging given English is a stress-timed multisyllabic intonation language where intonation is not used to distinguish words but to affect sentence meaning, whereas tone is used to differentiate word meaning in monosyllabic Chinese (Fromkin et al, 2018). English is also an inflectional language, making it more difficult for Chinese L2 English learners to comprehend L2 English morphology in spoken communication (Grabe, 2009).

Due to the stark linguistic differences between Chinese and English, and the aforementioned limited exposure to an English communicative environment, Chinese educators have increasingly turned to Mobile-Assisted Language Learning (MALL) (Liu et al., 2016). Meanwhile, the Chinese EFL market has seen a marked increase in the proportion of adults taking online private English tutorials for career development or personal benefit (Bolton & Graddol, 2012). To cater for such learners, a range of MALL applications from social media companies such as Facebook, WhatsApp, or WeChat has been designed to provide a communicative L2 practice platform, with WeChat the most popular with 1.2 billion monthly active users as of March of 2020 (Tencent, 2020). This popularity has now drawn the attention of EFL educators, with universities, schools, and language institutions in China having developed teaching curricula involving WeChat (e.g. Wuyugaowa, 2015; Wang et al., 2016; Ding, 2016; Jiang & Li, 2018; Guo & Wang, 2018).

The basic functions of WeChat include free instant text and voice messaging along with more advanced functions such as group chatting, video conferencing, and picture posting. Through these functions, WeChat can be used by educators to create an interactive and immersive language environment for English study (Ding, 2016). While the use of WeChat for language learning in China has been the subject of previous research (e.g. Wang et al., 2016; Ding, 2016; Jiang & Li, 2018), such research has primarily focused on its effectiveness at eliciting language output, providing alternative language learning activities, enhancing learners' agency, and reducing their learning anxiety within classroom settings. There are very few empirical studies focusing on private tutoring or other contexts beyond the classroom (Benson, 2011; Sundqvist, 2011).

The present study aims to add to the literature by investigating how WeChat promotes improved L2 pronunciation and fluency for Chinese EFL learners in private tutoring settings, exploring the following two research questions through a MALL-focused interactionist account (Levy & Stockwell, 2006):

RQ1: How do Chinese adult EFL learners perceive the use of WeChat for improving their L2 learning in private tutorial settings?

RQ2: How do Chinese adult EFL learners manipulate the functions of WeChat voice messaging to improve L2 pronunciation and fluency?

Literature Review

Mobile-Assisted Language Learning

EFL learning on WeChat falls under the umbrella of MALL, a combination of mobile learning and Computer-Assisted Language Learning (CALL) (Kululska-Hulme & Shield, 2008) involving learning language through the use of mobile devices such as mobile phones, tablets and applications (Viberg & Grönlund, 2012). MALL differs from CALL in that it is portable, facilitating increased interaction via spontaneity of access, and involves a diversified range of learning activities designed to engage second language learners through the convenient delivery of learning content via mobile devices. In experimental research (Abdous et al., 2012; Oberg & Daniels, 2013; Hsu, 2013), a positive connection has been observed between the use of mobile devices and improvements in vocabulary acquisition, listening, and speaking skills. As a recent example, Miqawati (2020) designed a MALL application (*Tflat English Pronunciation*) before using it as courseware for school students for pronunciation practice. Findings suggest the application greatly promoted students' ability in pronouncing English words.

Importantly, interactionist accounts of SLA provide a strong theoretical foundation for MALL research, with MALL increasingly seen as a means for learning through social interactions and with several studies demonstrating that MALL promotes conversational interaction conducive to L2 development (Blake, 2000; Liu et al., 2016; Salaberry, 2000; Zhang, 2015). There have also been a number of such studies in the Chinese context, with Liu and He (2014) exploring the uses of mobile applications among 20 university students in China, with findings suggesting that Chinese students expressed a strong willingness to use MALL to self-regulate their L2 learning. Liu et al. (2016) also confirmed a wide acceptance of MALL in informal English study among Chinese students following an extensive survey among 240 teachers and students in China. L2 learners using MALL in China in Zhang (2015) were also observed to be highly self-motivated and interested in producing language output through interaction on mobile devices.

Part of the success and popularity of using interactive applications for language learning may be ascribed to how MALL functions to facilitate synchronous interaction. The next section, therefore, discusses the employment of synchronous CMC for language learning.

SCMC (Chat) And L2 learning

The use of 'chat' software, otherwise known as Synchronous Computer-Mediated Communication (SCMC), has been studied as a means for second language acquisition by many researchers (Smith, 2003; Tudini, 2010; Xie, 2002). According to interactionist accounts of SLA, the interaction between learners is considered the main mechanism by which languages are learned (Randall, 2007), and the synchronous nature of chat software such as Skype, WhatsApp, or WeChat is claimed to be more conducive for negotiation for meaning than asynchronous forms of CMC such as e-mail (Levy & Stockwell, 2006). Tudini (2010) also points out that the real-time (synchronous) nature of chat communication obliges participants to engage in and co-construct online talk, as occurs in face-to-face conversation. Synchronous CMC has almost the same zero-time gap as face-to-face communication, which exerts time pressure on learners who are pushed to produce language output when interacting with other learners (Skehan, 1998). As an example, in Dalton (2011), Skype Chat was used as an SCMC tool among second

language learners, finding benefits for interlanguage development due to the informal and low-pressure L2 social environment provided by the platform. Sotillo (2000) remarked that SCMC seems to encourage communicative fluency as reflected by increased coherence, fluidity, and appropriate lexical choices in language output. Lai and Zhao (2006) also concluded that the SCMC condition better-enabled awareness of L2 errors due to the graphic form of language communication where text-based online chat made it possible for the participants to go back to read their output and make revisions as they saw fit. In a recent empirical study conducted by Lenkaitis (2020), 15 teacher candidates corroborated the effect of establishing authentic language practice with learners via SCMC-based virtual exchange, with both teacher candidates and learners accrediting the synchronous nature of exchange for improved L2 performance.

It should be pointed out that most SCMC studies have explored text-based chat, leaving a dearth of research on oral forms of SCMC. As Deutschmann et al. (2009) point out, many L2 learners lack the means to develop oral skills as a result of limited opportunities for natural L2 interaction in their local context. Though text chat has attested benefits for L2 acquisition, this medium necessarily omits opportunities to practice kinesthetic and prosodic features of spoken communication including accent, stress, volume, pitch, intonation, and rhythm in oral interaction, which may facilitate improved language fluency. Kitade (2000) also noted that interaction in text-based SCMC is devoid of turn-taking competition, where interlocutors cannot interrupt each other in the same way as they can in speech. This results in learners' inability to keep the conversation 'flowing' when forced to produce oral communication. However, with the development of mobile technology, personal social media applications such as WhatsApp and WeChat which facilitate voice messages and voice-based SCMC may finally allow for L2 learners to use MALL to improve their L2 oral proficiency. The next section, therefore, reviews the use of WeChat for L2 learning.

WeChat And L2 Learning

A review of the current research involving the use of WeChat with EFL learners shows that WeChat has been extensively integrated into various language teaching and learning contexts, with numerous studies conducted to investigate how the immersive environment afforded by WeChat may improve learners' agency and the development of oral communicative skills.

In a case study conducted by Zhang (2015), three different WeChat public accounts were created to investigate their function as a communication forum. The findings revealed that WeChat provided easy access to relaxed social communication while promoting synchronous interaction between people from different places. In Ding's study (2016), 342 college students were tracked for 18 weeks to investigate improvements to agency and critical thinking abilities during WeChat-mediated language learning and found increased active participation by the students and high interest in employing WeChat for L2 practice. In experimental research conducted by Wuyugaowa (2015) on two classes of university EFL students, after taking a WeChat mediated class for 38 days, the data revealed 95% of the students claimed using WeChat voice messaging improved their communication skills and increased their desire to speak more in the L2. In a study on two student groups with and without WeChat-assisted pedagogy for one semester, Shi et al. (2017) observed that students who received WeChat-assisted teaching significantly

improved their English fluency and proficiency on pre/post-tests. The authors also concluded that WeChat-assisted L2 learning helped students reduce their anxiety, increase their confidence in using their second language for communication, and further improve the quality of their language output. Wang (2017) systematically reviewed different functions of WeChat for L2 learning, concluding that WeChat could facilitate English pronunciation teaching and learning both inside and outside of class, and suggesting that incorporating learning applications on smartphones into classroom practice promotes higher learner agency for L2 oral interaction and engagement. Wang et al. (2016) investigated semi-synchronous and synchronous interaction in English on WeChat and found that through modifying their language output on an information-sharing forum through synchronous interaction between speakers, the students significantly improved their skills on negotiation for meaning. Jiang and Li (2018) paired fifteen Australian students learning L2 Chinese with native Chinese speakers for WeChat communication activities, finding that learning occurred most effectively during meaningful online interaction between speakers. The latest research organized by Tong et al. (2020) also corresponded with previous research regarding WeChat's affordances for L2 learning. The study proposed a WeChat task model while demonstrating that WeChat tasks provided learners with numerous opportunities for language practice after class while increasing learner autonomy.

While useful, the above studies were all conducted with high school or college students in school settings, leaving a gap of accounts of WeChat's impact on adult students' spoken L2 English development in private tutoring settings that is to be addressed in the present study.

Method

Design of WeChat private tutoring course

Figure 1
Private tutoring via WeChat

The private tutoring course comprises three sections as shown in Figure 1. In Section 1, the teacher initiates a one-on-one video class with the learner, usually lasting for two hours, via WeChat video call (Figure 2); In section 2, students practice speaking by manipulating voice messaging functions on their own. The teacher assigns speaking tasks i.e. retelling a story or reporting an event, students will practice their pronunciation and fluency by manipulating voice messaging functions before sending the speaking

homework via WeChat voice message (as shown in Figure 3). In section 3, students interact with the teacher or other learners on topics revolving around the assigned tasks for independent output realized by voice messages. For each voice message, the teacher requires students to speak for a continuous 60-second period which is the maximum time a voice message can take per instance, with an accompanying 10-second countdown to remind users of the remaining time.

Figure 2
Private tutoring via WeChat video call

Figure 3
Speaking exercise via WeChat voice messaging

The two functions students manipulate most often for speaking practice are *Cancelling* and *Recalling*. When students notice an error in their L2 production, WeChat permits the cancellation of a voice message by the 'sliding up to cancel' and 'release to cancel' option as shown in Figure 4. Students can thus record and cancel multiple times before sending the final version. During this process, students may practice and revise their language output with improved fluency and accuracy.

Figure 4
Cancelling a voice message in WeChat

After sending a voice message, students are encouraged to listen back to their voice recordings embedded into the chat, providing another opportunity for students to review and monitor their language output. If a student notices an issue, they can recall the voice message and send it again (shown in Figure 5). This function allows students to review and monitor the quality of their production, making corrections as the conversation unfolds.

Figure 5
Recalling a voice message in WeChat
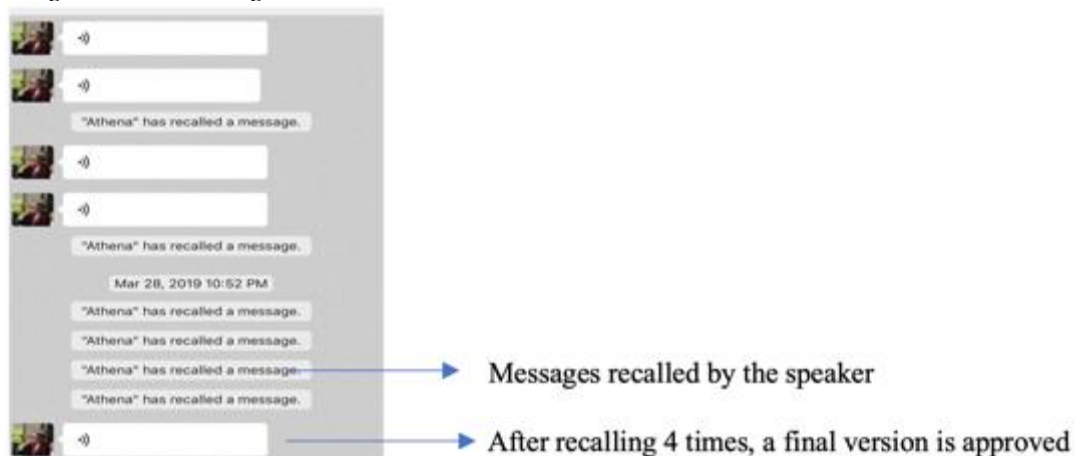
Participants

The participants are drawn from a WeChat group created by the researcher comprising 120 adult EFL learners taking WeChat private tutorials with the researcher. Therefore, each participant may be considered familiar with the full range of WeChat functions used for English practice as previously described in Section 3.1. The researcher received 50 responses for the questionnaire survey, with respondents aged between 21 and 50. Five respondents expressed their interest to join a subsequent interview survey,

and two of these five students agreed to present their WeChat logs as case study data. The five interviewees are all females aged between 35 and 51. Their English level ranged from novice to pre-intermediate according to mock IELTS test scores, and they have used WeChat as a means for English study at least for one year.

Table 1

Participants for interview/case study.

Name	Age	English Level	Participation
Liz	43	Novice	Interview, Logs
Athena	51	Novice	Interview, Logs
Wendy	40	Pre-intermediate	Interview
Lindsay	38	Pre-intermediate	Interview
Lily	35	Pre-intermediate	Interview

Instruments and data collection procedure

The researcher followed a mixed-methods design (Dornyei, 2007) to generate a more complete understanding of how WeChat facilitates Chinese EFL learners' L2 development. Quantitative and qualitative data were collected sequentially to validate each other (Heigham & Croker, 2009). To answer the two RQs, three research instruments were employed to collect data: a questionnaire based on Jiang & Li (2018)'s study for quantitative data and interview and case study for qualitative data following the approach of previous WeChat focused studies (e.g. Xu et al., 2017). By triangulating methods, researchers can better verify the data extracted from each research instrument (Sundqvist, 2011).

The researcher distributed the questionnaire to the participants on WeChat (the questions are shown in the Results section). A five-point Likert scale questionnaire designed to collect the general perceptions on using WeChat as a tool for English study was created using a Chinese survey application (wjx.cn), with items modified from previous MALL-focused instruments including Jiang and Li (2018) and Liu et al. (2016). The questionnaire consisted of 23 five-point Likert-scale questions where 5 means "strongly agree", 4 "agree", 3 "neutral", 2 "disagree", and 1 "strongly disagree", and two open-ended questions each written in Mandarin supporting the Likert-scale responses. The questionnaire was piloted among nine students who were each provided with a Chinese version. The participants were consulted about any problems they found with the questionnaire items and the key issues they raised regarded repetitive items and leading questions. Some students mentioned some survey questions were covering similar issues while other questions such as "Given that WeChat supports exchanging voice-messages in English, do you use WeChat for English study?" indicated a favored answer to be chosen by respondents. Based on the feedback, the questionnaire was modified before data was collected data from the remainder of the participants. Quantitative data from all questionnaire respondents were analysed using SPSS, with a Cronbach α value of 0.908

indicating high reliability of the data and with no item's CITC value lower than 0.3 except item 12 (shown in Table 2), which is a negatively constructed item to validate item 22 to avoid respondents' one-sided marking (Dornyei, 2007).

Semi-structured interviews were conducted via WeChat video call. The researcher employed a question guide for an interview while accommodating interviewees' ideas to collect personalized qualitative data as well as to triangulate the quantitative data from the questionnaire (Dornyei, 2007). The semi-structured interviews were conducted along with two main guiding questions:

1) What do you think of using WeChat for English study?
2) How do you use WeChat Voice messaging to improve pronunciation and fluency?

Each interview lasted around 30 minutes. The interviews were transcribed and each participant was given a pseudonym. The interview results were analyzed through a pre-coding and coding process (Dornyei, 2007), focusing on interviewees' attitudes toward using WeChat to learn English, and interviewees' manipulation of the WeChat voice messaging function for improving speaking performance.

A case study was then conducted with data generated from two learners' saved WeChat logs. The two participants for the case study expressed their willingness to share their interactions with the teacher on WeChat logs saved on their mobile devices. These WeChat logs were primarily in the form of audio messages alongside traditional text chat messages. To track longitudinal L2 development, the researcher selected every 30th hour of excerpts of SCMC interaction between the learner and the teacher as reflective of said development as mediated through WeChat voice messaging. Given the learners were adults and were faced with work commitments and varying schedules, their study time was not evenly regulated as in a school syllabus, therefore the 30th hour spanned two months in one case, and over half a year in another. Case study one's (Athena) data were used to determine improvements regarding pronunciation and fluency whereas case study two's (Liz) data were used to track morphosyntactic improvement during L2 performance.

Findings and Analysis

Questionnaire survey data

The questionnaire items are presented here in order of their theme rather than their order in the questionnaire. Among the 23 Likert-scale questions, items 3, 11-23, 25, and 27 shown in Table 2 are used to investigate learners' perception of WeChat for improving L2 oral performance. The mean scores of most items were close to or above 4, which meant that participants generally agreed to all the statements. Item 3 (mean=3.24) revealed as many as 76% of respondents (n=38) reported a general acceptance of using WeChat to practice English, with 22% respondents (n=11) reporting using WeChat infrequently and with one respondent claiming to have never used WeChat for English learning (their results were discounted for subsequent questions). The negatively constructed item 12 (mean= 2.16) validated the learners' positive perception of sending voice messages to improve speaking performance. These findings confirm the general

popularity of WeChat for language learning among the learners surveyed as also seen in other studies on classroom learners (e.g. Wang et al., 2016; Guo & Wang, 2018). Students also appreciated the positive impact of the synchronous features of WeChat voice messaging on their L2 fluency and pronunciation as revealed by items 20 and 27, and positive perceptions of manipulating voice messaging functions for L2 speaking improvement are revealed in responses to items 11-27.

Table 2

Respondents' Perceptions of WeChat for Language Learning

QUESTION ITEMS IN QUESTIONNAIRE	MEAN	SD
3. I use WeChat to practice English	3.24	1.061
11 I think practice speaking English on WeChat overcomes space and time limit	4.08	1.007
12 I disagree sending voice messages on WeChat helps with my spoken English	2.16	0.997
13 I think sending English voice messages on WeChat helps me with my language fluency	3.74	0.944
14 I think listening back to the English voice messages I have sent helps me monitor my own language quality	4.22	0.815
15 I think listening back to the English voice messages I have sent raises my awareness of my error or slips	4.16	0.866
16 I think listening back to the English voice messages I have sent facilitates self-correction	4.12	0.849
17 I think communicating with my teacher and friends in English on WeChat reduces my anxiety	3.84	1.057
18 Sending English voice messages forces me to use English out of class	3.96	0.925
19 Sending English voice messages makes me familiar with producing English sound	4.1	0.789
20 WeChat messaging improves the process of acquiring English pronunciation	3.56	1.215
21 I feel comfortable practicing English with my Chinese friends in real life rather than on WeChat	3.54	1.014
22 I find sending English voice messages on WeChat an effective way to improve the fluency of my spoken English	3.76	0.847

23 I find sending English voice messages on WeChat improves my intelligibility	3.64	1.083
25 I find receiving English voice messages on WeChat improves my understanding of English	3.72	0.948
27 I find overall interacting with my teacher on WeChat helps my language acquisition	4.16	0.866

Table 3 shows respondents' manipulation of voice messaging functions for L2 speaking and their positive impact on speaking performance.

Table 3
Respondents' Use of WeChat Voice Messaging Functions for Language Learning

QUESTION ITEMS IN QUESTIONNAIRE	MEAN	SD
4 I listen back to my sent voice messages to check my English output quality	3.42	1.214
5 I cancel the voice message and record it again if I am not satisfied with my English quality during recording	3.88	1.272
6 I recall the voice message and resend it when I am not satisfied with my English quality after listening to it	3.6	1.429
7 I repeat several times cancelling and re-sending before I send the final version	3.52	1.297
8 I notice the difference between my production and that of the target language when I listen back to my English more often	3.98	1.059
9 The sixty second limit of WeChat voice messages forces me to monitor my fluency and speak faster	3.74	1.192
10 Group talk on WeChat gives me an opportunity to speak English with others in real life	3.44	1.181

Items 4-8 revealed respondents generally manipulated recording, cancelling, and recalling functions during L2 interaction, frequently listened back to voice messages following speaking practice, and agreed that these functions were beneficial for increased control over the production of their L2 output (items 4-5), and monitoring errors or disfluencies (items 6, 8). The ability to make post-hoc modifications to their output before deciding on the final speaking product for assessment and the performance pressure created through the 60-second speaking time limit resembling real-life interaction was seen as particularly important functions afforded by WeChat voice messaging, as shown by items 7 and 9. The immersive environment afforded by WeChat group chats is also appreciated by the respondents (item 10).

Two open-ended questions eliciting learners' perception on using WeChat voice messaging focused on affordances for output (item 24) and pronunciation (item 26). For the former, participants commented on how listening back facilitated self-correction, and how the ability to practice their production multiple times reduced language anxiety during interaction with peers and the teacher. Regarding pronunciation, participants provided positive feedback about how frequent exposure to the target language through voice messaging and repeated listening resulted in being more familiar with L2 pronunciation, leading to more comprehensible input and improved overall comprehension.

Interview findings

For the first guiding interview question ('What do you think of using WeChat for English study?'), respondents reported that easy access to a communicative environment as afforded by WeChat helped improve their L2 pronunciation and language anxiety:

Liz: Pronunciation is very important. I see it as the most important feature of good English. WeChat allows me to practice my pronunciation and know where to improve.
Lily: Good pronunciation and fluency helps communication, and it appeals to my coworkers. Fluency and professional use of English affects my professional image. Without listening back to my voice messages, I would not know how my pronunciation came across.
Lindsay: Bad pronunciation has a negative impact on my confidence. Pronunciation also affects my professionalism. My coworker will judge me by my English level. Practicing on WeChat helps relieve my anxiety in speaking English.
Liz: The real-time practice by sending voice messages can improve my confidence and comfort when speaking English in a natural environment.
Wendy: I use voice messaging to communicate with my friends in English. The more I talk with them on WeChat, the more fluent I feel I can be.

For the second question (' How do you use WeChat Voice messaging to improve pronunciation and fluency?'), regarding manipulating WeChat voice messaging, all interviewees agreed that listening back to their sent voice messages helps them to better notice gaps in both their performance and knowledge of language, although there was less agreement among interviewees regarding whether they actually took the time to listen back, or simply recorded new messages directly:

Liz: I always listen back. I don't notice my errors while speaking until I listen back.
Lindsay: I often listen back to my voice messages to check my intonation because when I am speaking, I only focus on words and meaning.
Wendy: I often listen back to my teacher's voice messages but I do not listen back to mine because I don't like my English.
Athena: I do not often listen back to my own voice message. I would rather listen to the listening material.
Lily: I sometimes listen back but not too often because I feel embarrassed listening to my own voice, and I dislike my own pronunciation.

Individual students' desire to listen back to previously sent voice messages may correlate with their general oral proficiency, with Wendy, Athena, and Lily having generally weaker L2 fluency and pronunciation skills than Liz and Lindsay. The 60-second time limit function of WeChat voice messaging was also deemed important by both survey and interview respondents, with each agreeing that the strict time limit pushed students to make faster, more coherent responses:

Wendy: The 10-second countdown feels like someone is pushing me for a reply. It also presses me to speak faster.

Findings from WeChat logs

The data extracted from learners' WeChat logs presents evidence of how interactive, focused practice on WeChat voice messaging helps L2 learners with their speaking performance. Case study one (Athena) provides evidence of the development of the learner's fluency and pronunciation, while case study two (Liz) documents instances of negotiation for meaning on grammar points with the teacher.

Case Study 1: Athena

Athena is a full-time housewife in her early 50s. She began studying English as a novice student and finds English pronunciation extremely difficult to acquire. The following WeChat logs chart Athena's development of fluency and pronunciation at 30-hour intervals.

Figure 6
Pronunciation practice (February 2017)
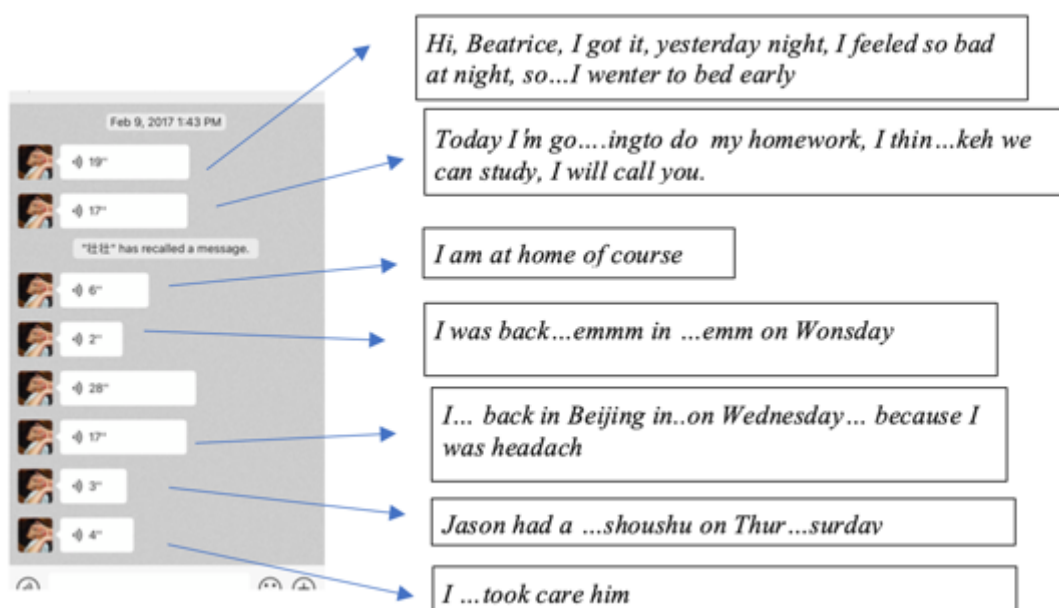
Figure 6 presents excerpts from the first 30th hour of study. The learner produced only short sentences in English lasting two seconds to 19 seconds (the 28-second sentence

was produced in Chinese). The learner struggled with the pronunciation of the days of the week (e.g. "surday", "wonsday") as well as the verb 'think' ("I thin…ker we can study"). At this stage, the teacher asked her to listen back to her language output and compare it with a previous recording by a native speaker of the target language, to notice the gap between her language output and the accurate pronunciation of these forms in the target language.

Figure 7
Interaction With the Teacher (April 2017 – Green messages are from the teacher)

Figure 7 contains extracts of the 60th hour of study two months later. The learner was able to produce sentences, which while shorter in duration than seen previously, demonstrated improved fluency. Here, teacher-student interaction focused on using past tense forms of the copula (was, were) and other simple verbs. To make the input easier for the learner to comprehend, the teacher responded to her by text messaging rather than through voice messaging. At this stage, the learner had just learned 'I did' after learning 'I do'. She self-corrected 'I don't' to 'I didn't' when attempting to give a reason for not completing her homework. The teacher asked her "where were you" to remind her to use the past tense and provided a model word "were" for a past tense form of 'be'. The learner then noticed she was required to use the past tense and used 'was' for her sentence and self-corrected 'talk' to 'talked'. The teacher asked another short question to push Athena to produce more output, resulting in the student producing a longer sentence in the past tense ("I talked with my son by phone this morning") followed by a confirmation check for the teacher. This process resulted in the learner noticing a problem and being 'pushed' to modify their output accordingly (Swain & Lapkin, 1995).

Figure 8
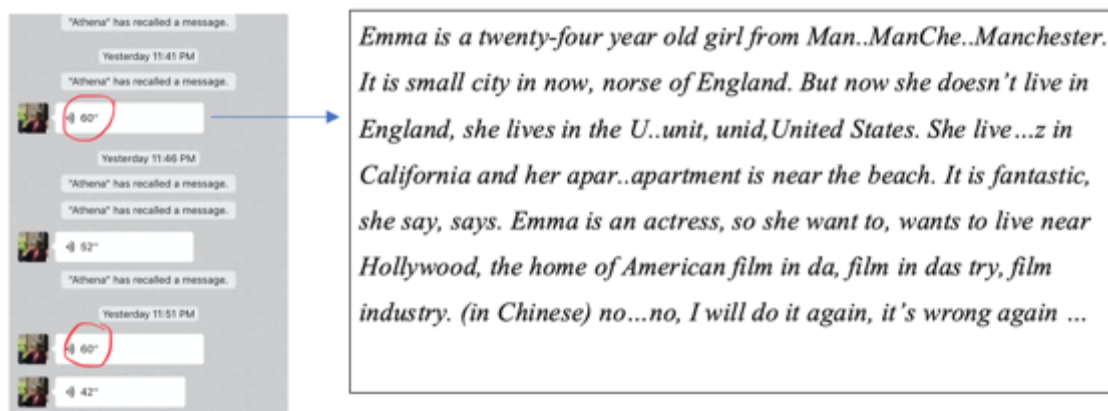*Athena's Improved Fluency (Feb 2018)*

Figure 8 describes the most recent WeChat logs taken from the 90th hour of study, one year after the first logged session, and demonstrates the learner's improved fluency development as evidenced in the form of voice messages frequently meeting the 60 second time limit. Athena encountered pronunciation difficulties, yet made efforts to correct herself ("unit, unid, United States"). Athena did not manage to complete the story in 60 seconds in the first attempt. She listened back to the sent message and noticed her breakdown in intonation and errors, then manipulated the recalling and cancelling function to repetitively practice the target sentences. On her last attempt, she finished the whole story in just 42 seconds, a significant improvement over her initial attempts.

Case Study 2 - Liz

Liz is an actress just turning 40. She studies English with the hope to develop her career in international markets by being able to play English speaking roles.

Figure 9
Interaction with the Teacher and Negotiating the Meaning of Grammatical Forms (March 2017)
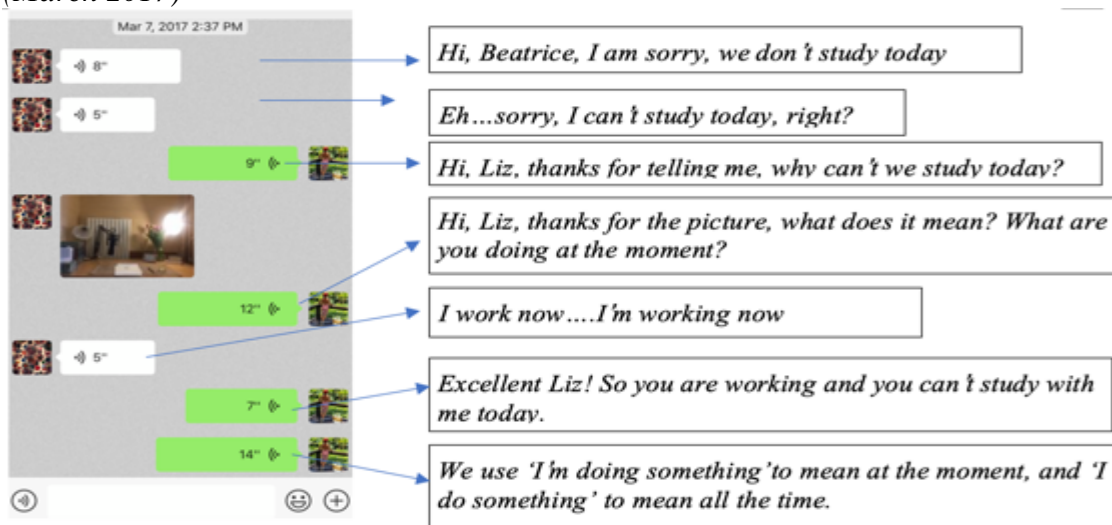
At the first 30th hour of study (Figure 9), Liz had finished a lesson on the present simple, present continuous, and use of 'can' at that time, and was struggling to differentiate the use of the tenses in different contexts. Liz self-corrected her sentence from "I don't study" to "I can't study", with the teacher asking her "Why can't we study?" to confirm and consolidate her use of 'can' and to elicit further language output. The student answered by sending a picture without language output. The teacher kept pushing the student to produce more output by asking "what does it mean?" and providing a model question form "what are you doing at the moment?" to remind the student she should use present continuous form. Hesitantly, the student replied briefly "I work now". After pausing for one second, she self-corrected her sentence to "I'm working now". This collaborative dialogue forced the learner to pay attention to the meaning of the form according to the context, modifying the form used accordingly.

Figure 10
Interaction with the Teacher and Negotiating Grammatical Forms (January 2018)

Figure 10 demonstrates how the learner acquired preterit and present perfect tense. As shown from the excerpts of this 60th hour of study, the learner made a clarification request regarding how to differentiate the use of 'I saw' and 'I have seen'. The learner corrected her errors and modified her production from "I saw it already" to "I have seen it already" during the negotiation for meaning with the teacher. The teacher provided model sentences, codeswitched into Chinese to explain present perfect tense, recast her learner language ('I seen' to 'I have seen'), and offered comprehension checks by asking "what have you done today" and "what did you do yesterday?" The learner attempted to distinguish the present perfect from simple past tense ("I have watched it, I watched it yesterday with my son") and restructured her output from "I seen" to "I have watched"

in the appropriate present prefect tense. Liz further sought confirmation from the teacher in Chinese to consolidate her comprehension of the uses of the two tenses. The negotiations arising from this interaction pertained to morphosyntactic forms, and reflect how interaction through WeChat provided the learner the opportunity to use the newly acquired language form in free oral production.

Figure 11
Fluency Practice (April 2019)

The most recent WeChat log from Liz (Figure 11) was a speech involving present simple, present continuous, past simple, and present perfect tenses. The student cancelled a series of voice messages before managing to complete a full-length message in 60 seconds with marked improvement in fluency and using a morphosyntactic variation to negotiate for meaning.

Discussion

This study examined how Chinese adult EFL learners use WeChat to improve their L2 oral communication in private tutoring settings while evaluating learners' manipulation of WeChat Voice messaging for L2 performance. The findings suggest interaction through WeChat facilitates English learning, and the immersive language environment supported by voice messaging particularly helps improve fluency and pronunciation. These findings are consistent with a number of other studies on the benefits of WeChat for L2 language study in classroom settings (e.g. Jiang & Li, 2018; Shi et. al., 2017). However, this study builds on the literature regarding how adult learners on private tutoring course perceive of and use WeChat voice messaging to improve L2 speaking performance.

Regarding RQ1 on Chinese adult EFL learners' perceptions of WeChat for improving their L2 learning in private tutoring settings, most learners in this study were positive regarding WeChat's potential for language learning. In addition to a general acknowledgment of raised confidence following extensive engagement with the immersive L2 platform afforded by WeChat, the interview data also showed the learners' appreciation of WeChat for relieving their language anxiety and boosting their speaking agency, corresponding with the findings of previous studies on WeChat-assisted English lessons in classroom settings (e.g. Jiang & Li, 2018; Wang, 2017). Some students reported an increased discernment of the pronunciation features of the L2 during speaking practice, which helped them consciously regulate their L1 pronunciation transfer during L2 production. However, although most interviewees welcomed the convenient access to L2 practice afforded by WeChat, this convenience was not always without criticism. Athena reported difficulty concentrating when producing the L2 in short bursts instead of having a dedicated class period. This, however, is an issue with MALL in general rather than a specific criticism of WeChat, in that one of the principles of effective MALL provision is to limit environmental distractions (Stockwell & Hubbard, 2013).

Regarding RQ2 on how Chinese EFL learners manipulate the functions of WeChat voice messaging to improve L2 pronunciation and fluency, the data show WeChat is useful for improving English fluency and pronunciation through voice messaging. Most students reported manipulating *cancelling* and *recalling* of voice messages very beneficial, along with checking their output quality by listening back to either a model message sent by the teacher, or their own voice messages. The act of listening back to previously sent voice messages pushes these learners to focus on their L2 interlanguage production, potentially aiding noticing of gaps in their language knowledge (Schmidt, 1990; Swain & Lapkin, 2000) while facilitating self-regulation of their pronunciation. The data presented in the WeChat logs also provides further evidence of the development of L2 pronunciation and fluency through meaningful interaction on WeChat. Data in Figures 7 and 9 attest to Tudini's (2010) claim that synchronous chat obliges learners to engage in and co-construct online talk with the teacher, and students are pushed to produce language output under time pressure similar to face-to-face communication (Skehan,1998). Athena made increased headway on her pronunciation after listening back to previously sent messages, frequently self-correcting after communicating with the teacher and repeating messages for better pronunciation and fluency. This corroborates the claims of Sotillo (2000) and Lai and Zhao (2006) that SCMC encourages communicative fluency and enables noticing of linguistic mistakes. However, the interview data touched on differences in learners' sensitivity to such noticing, as some learners reported easily noticing poor pronunciation while others failed to. This phenomenon can be due to individual differences in learning styles. A possible solution is for teachers using WeChat to design individually customized interactional speaking tasks involving voice messaging so that different learners may target their pronunciation gaps.

The data also show the 60-second time limit of WeChat voice messages pushed students to speak faster and more coherently, which is a phenomenon consistent with Swain and Lapkin's (2000) statement that pushed output practice, where a learner is forced to produce utterances in the target language, facilitates language acquisition and improves language fluency and proficiency. The fixed time limit for WeChat messages forces students to manage their speech rate and pauses/repetitions, which are important

indices of fluency (McDonough et al., 2013). Additionally, given Hahn's (2004) suggestion that pronunciation instruction was more effective when it focused on suprasegmental rather than segmental aspects of pronunciation such as stress and rhythm, students facing the 60 seconds time limit afforded by WeChat are pushed to focus more on suprasegmental features of English to complete their production in the set time, with resulting improvements in fluency.

Despite previous researchers' observations that most L2 SCMC interaction is of a relatively low grammatical value for negotiation of meaning (Pellettieri, 2000; Blake, 2000), the data from Liz's case tracked the development of grammatical competence in tense production during interaction with the teacher. Liz's Wechat logs documented improvements in tense production as a result of being pushed to produce output and engage in collaborative dialogue with the teacher through WeChat, leading to her noticing certain grammatical features she had overlooked. This finding echoed Pellettieri's (2000) conclusion that that SCMC can push learners to focus on the form of their output, and is in line with other studies suggesting interaction in MALL can promote conversational interaction conducive to L2 grammatical development (Blake, 2000; Salaberry, 2000). Moreover, the results of both case studies echo Well's (2000) observation that the frequency of practice is a key factor in the rate of L2 acquisition, as evidenced by the longitudinal development exhibited by both learners at the 30-, 60- and 90-hour mark.

Conclusion

The present study has investigated the use of WeChat for English learning. The findings from the three research instruments have indicated a generally positive influence of WeChat on the improvement of L2 pronunciation, fluency, and grammatical development. The data suggest WeChat can provide an immersive English environment for learners in private tutoring settings to practice English, and that WeChat can raise the learners' awareness of their gaps in pronunciation and grammar through meaningful interaction. The result of this study has also provided useful data on the language development of Chinese EFL learners in private tutoring settings, which is important given that most prior studies have focused on the experiences of classroom students.

Two main pedagogical implications arise from the present study. Firstly, teachers need to consider the benefits of using WeChat for customized tutorials for adult students during private tutoring, catering to their increasing demand for flexible and ubiquitous access to language study particularly given COVID-19 restrictions on classroom learning. Secondly, teachers can incorporate voice messaging more systematically to help students apply the grammatical knowledge learned in class to natural language interaction while increasing learner autonomy and reducing language anxiety.

However, as the sample size of this study is rather small (n=50), the data gleaned from these respondents may not be sufficient to support generalizations involving diverse Chinese learners. Second, all respondents previously experienced language learning through WeChat and so their opinions may be more favourable than those using other platforms. The quality of this study can therefore be improved with a study on a larger cohort, alongside more experimental data comparing the learning gains experienced by WeChat users both within and outside of classroom L2 learning.

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