Use of WhatsApp as a Platform to Promote English Oral Fluency and Accuracy: A Task Repetition Approach

Uso del WhatsApp como plataforma para desarrollar la fluidez oral y la precisión en inglés con base en el método de repetición de tareas

Utilisation de WhatsApp comme plateforme pour développer l'aisance et la précision à l'oral dans la langue anglaise suivant la méthode de répétition des tâches

Uso do WhatsApp como plataforma para desenvolver fluência e precisão oral no inglês com base na repetição de tarefas

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Abstract

Nowadays, English as a foreign language (EFL) teachers needed to adapt their practices to continue teaching the foreign language with the use of different emerging technologies and online platforms. This required them to develop a greater number of digital skills to promote students' language production and achievement. Drawing on evidence which suggests that task repetition is beneficial for developing oral production in speaking and writing tasks, this exploratory study investigates the fluency and accuracy demonstrated by seven Mexican EFL students from a state university in a monologue narrative task performed on WhatsApp following a task repetition design. Fluency and accuracy metrics show that these skills appear to fluctuate in the students during the performance of the task. Interestingly, they also suggest that only fluency increased as the weeks went by, while accuracy development was limited. These results raise questions about the dynamic nature of fluency and how it may interact with accuracy, other language dimensions, student-related factors, and the online environment.

Keywords: oral accuracy, oral fluency, narrative tasks, task-based language teaching, TBLT, WhatsApp, mobile-assisted language learning, MALL, complexity accuracy fluency framework, CAF

Resumen

En la actualidad, los docentes de inglés como lengua extranjera (ILE) se vieron en la necesidad de adaptar sus prácticas para seguir enseñando la lengua extranjera mediante el uso de diferentes tecnologías emergentes y plataformas en línea. Esto

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les exigió desarrollar un mayor número de habilidades digitales para promover la producción lingüística y el avance en sus estudiantes. Con base en evidencia que indica que la repetición de tareas favorece el desarrollo de la producción oral en tareas de habla y escritura, el presente estudio exploratorio investiga la fluidez y precisión demostradas por siete estudiantes mexicanos de ile de una universidad pública en una tarea narrativa monológica realizada en WhatsApp siguiendo un diseño de repetición de tareas. Las métricas de fluidez y precisión muestran una fluctuación en los niveles de fluidez y precisión de los estudiantes durante la ejecución de la tarea. Es interesante notar que también indican que solo la fluidez aumentó con el transcurrir de las semanas, mientras que la precisión no mostró un desarrollo significativo. Estos resultados plantean interrogantes sobre la naturaleza dinámicas de la fluidez y su interacción con la precisión, otras dimensiones de la lengua, factores relacionados con los estudiantes y el entorno virtual.

Palabras clave: precisión en lengua oral, fluidez oral, tareas narrativas, enseñanza de lenguas basada en tareas, WhatsApp, complejidad, precisión y fluidez, caf, aprendizaje de lenguas mediante tecnología móvil

Résumé

Aujourd'hui, les enseignants d'anglais langue étrangère (ale) ont vu la nécessité d'adapter leurs pratiques pour continuer à enseigner la langue étrangère en utilisant différentes technologies émergentes et plateformes en ligne. Cela leur a demandé de développer un plus grand nombre de compétences numériques pour favoriser la production et la progression de la langue chez leurs étudiants. Sur la base des preuves indiquant que la répétition des tâches favorise le développement de la production orale dans des tâches d'expression orale et écrite, la présente étude exploratoire examine la fluidité et la précision démontrées par sept étudiants mexicains ale d'une université publique dans une tâche narrative monologue effectuée sur WhatsApp suivant un modèle de répétition des tâches. Les mesures de fluidité et de précision montrent une fluctuation des niveaux de fluidité et de précision des élèves pendant l'exécution de la tâche. Il est intéressant de noter qu'ils indiquent également que seule la fluidité a augmenté au fil des semaines, quoique les niveaux de précision sont restés faibles. Ces résultats soulèvent des questions sur la nature dynamique de la fluidité et son interaction avec la précision, d'autres dimensions linguistiques, des facteurs liés à l'apprenant et l'environnement virtuel.

Mots clef : précision à la langue orale, aisance orale, tâches narratives, enseignement de langues basée sur des tâches, WhatsApp, complexité, précision et aisance, caf, apprentissage de langues assisté par des appareils mobiles

Resumo

Hoje, os professores de inglês como língua estrangeira (ile) foram confrontados com a necessidade de adaptar suas práticas para continuar a ensinar a língua estrangeira através do uso de diferentes tecnologias emergentes e plataformas on-line. Isto exigiu que eles desenvolvessem um maior número de habilidades digitais para promover a produção e o avanço do idioma em seus alunos. Com base em evidências indicando que a repetição de tarefas favorece o desenvolvimento da produção oral em tarefas de fala e escrita, o presente estudo exploratório investiga a fluência e precisão demonstradas por sete estudantes mexicanos do ile de uma universidade pública em uma tarefa narrativa monológica realizada no WhatsApp após um projeto de repetição de tarefas. As métricas de fluência e precisão mostram uma flutuação nos níveis de fluência e exatidão dos estudantes

durante a execução das tarefas. Curiosamente, eles também indicam que apenas a fluência aumentou ao longo das semanas, apesar de os níveis de precisão terem permanecido baixos. Estes resultados levantam questões sobre a natureza dinâmica da fluência e sua interação com a precisão, outras dimensões da linguagem, fatores relacionados ao aprendiz e o ambiente virtual.

Palavras chave: precisão na língua falada, fluência oral, tarefas narrativas, ensino de línguas baseado em tarefas, WhatsApp, complexidade, precisão e fluência, CAF, aprendizagem de línguas assistida por dispositivos móveis

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Introduction

In language education, the way we teach and learn have recently changed significantly. Teachers worldwide have felt the necessity to adapt their teaching practices to online environments and distance language learning. In response, teachers quickly searched for different ways to communicate with students to continue teaching the target language. However, this abrupt transition has resulted in several important challenges that teachers and students commonly face inside and outside online learning environments. For example, when students are not prepared to learn online and use pedagogical platforms, they tend to face several challenges which might result in low motivation, lack of engagement, and low achievement (Garcia-Ponce & Mora-Pablo, 2020).

In order to respond to the demands of teaching the language online and thus ensure language achievement, teachers have continuously looked for online materials, resources, and platforms which help them continue teaching the language in line with their pedagogical objectives and beliefs. Quite clearly, the convenience and usefulness of emerging technologies, platforms, and apps have been recognised by stakeholders (students, teachers, coordinators, administrators, etc.) as resources to continue teaching and learning English. For example, WhatsApp is an instant messaging platform which allows users to send text and voice messages, make voice or video calls, and share images, documents, locations, and contact information. Thanks to these functions, this platform is now used by teachers and students to maintain synchronous and asynchronous interactions and perform tasks with a view to promoting second language (L2) production.

This exploratory study examines the use of WhatsApp as a platform to promote L2 oral production. To the best of our knowledge, there is limited research on the impact of task repetition conducted on WhatsApp. This is the research gap that the study attempts to fill. Because of the growing evidence which suggests that task repetition is beneficial for promoting students' oral performance (Bui, 2014; Bygate & Samuda, 2005), this research examines the behaviour of seven students' fluency and accuracy levels during a narrative task which was repeated four times on WhatsApp. Therefore, there are several important areas where this study makes an original contribution to our understanding of how task repetition influences student performance. First, this study offers new information on how a cognitively challenging narrative task repeated four times on WhatsApp shapes students' performance indicated by levels of fluency and accuracy. Second, it provides an examination of the behaviour of these two language areas which are commonly associated with meaning (fluency) and form (accuracy). Finally, it formulates a series of recommendations which teachers should consider if their intention is to use WhatsApp to promote L2 production.

Theoretical Framework

In the following sections, we discuss the literature relevant for this study. Firstly, we present literature on the concept of task and the complexity, accuracy, and fluency (CAF) framework. We then introduce some ideas related to mobile-assisted language learning (MALL) and task repetition.

Tasks and the Complexity, Accuracy, and Fluency Framework

Task-based language teaching (TBLT) is a communicative approach to teaching languages. In this approach, tasks are used to promote language acquisition (Ellis, 2005). In the literature, several definitions of a *task* have been suggested. According to Nunan (1989), a task is "a piece of classroom work which involves students in comprehending, manipulating, producing, or interacting in the target language while their attention is principally focused on meaning rather than form" (p. 10). Prabhu (1987) defines it as "an activity which requires students to arrive at an outcome

from given information through some process of thought, and which allows teachers to control and regulate that process" (p. 24). The significant point that emerges from these two definitions is that a task allows students to arrive at an outcome through the use of the second language. Nunan's definition suggests that a task is primarily focused on meaning which is associated with fluency. However, in this study, we are interested in exploring how and if a task repetition design has a beneficial impact on both fluency and accuracy.

For decades, tasks have been considered activities which have an impact on students' oral performance quantitatively and qualitatively (Garcia-Ponce et al., 2018). According to Garcia-Ponce (2017), tasks are believed to have an impact on students' performance because their design characteristics determine the cognitive processing that students need to perform the task at hand and thus achieve its pedagogic purpose or outcome. Similarly, Ahmadian (2012) claims that:

> because of the learning benefits of using tasks in the classroom, researchers, and practitioners in the field of second language acquisition (SLA) have directed their attention towards understanding how task design and implementation procedures (of pre- and post-task activities) can maximize language performance and learning. (p. 47)

For example, tasks promote negotiation, modified output, and experimentation with the language. These learning and production benefits have, in turn, motivated a growing area of research interest in the interplay between tasks and student performance. In the past, much research regarding tasks and their effects on student performance focused on other second language contexts, but this area has recently received increasing attention from several foreign language contexts, like the context of the present study.

The evidence so far has suggested that L2 performance during the execution of tasks is complex in nature (Sadeghi, 2016). According to Larsen-Freeman (2006) and Skehan and Foster (2008), this complexity is effectively captured by the CAF

constructs because they benchmark L2 production. Skehan and Foster (2012) state that "many studies of task-based second language performance use CAF to capture different aspects of second language performance" (p. 199). Initially, research in CAF, specifically the tasks related to it, examined mainly language use in terms of accuracy and fluency; but Skehan (2009) incorporated complexity, and this way, the triad of CAF became the fundamental dimensions to characterize L2 usage (Housen & Kuiken, 2009).

For this triad of CAF, we will use the following definitions. *Complexity* refers to the extent to which individuals use grammatically complex and advanced structures in the target language production while accuracy is viewed as "the ability to produce target language that is free of grammatical and other errors" (Richards, 2015, p. 730). Lastly, *fluency* is "the extent to which target language production is continuous, without causing comprehension difficulties or a breakdown of communication" (Richards, 2015, p. 738).

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In the past three decades, the work on CAF has grown exponentially, and has focused more on a pedagogical perspective and classroom-based research of L2 performance (Bulté & Housen, 2012; Khushik & Huhta, 2019; Kyle & Crossley, 2018; Lambert & Kormos, 2014; Skehan, 2009). It is from this perspective that CAF measures can be used as a framework to better understand L2 performances in speaking and writing which could lead us to understand the pedagogic factors that shape student performance and pedagogical interventions when necessary (Kuiken et al., 2010; Wigglesworth & Storch, 2009). For example, a prominent study regarding oral tasks was conducted by Foster and Skehan (1996), who utilized three tasks (personal information exchange, narratives, and decision making). Their results indicated that planning had an essential role in all three areas, including accuracy. This prompted more research on task-based instruction mainly focusing on tasks and task conditions and how they can be manipulated to

promote language performance and maximize CAF, even when these elements compete with one another.

Furthermore, Barrot and Agdeppa (2021) point out that recent studies have demonstrated that CAF measures are "influenced by task-related factors, student factors, and context-related factors such as planning time, topic, and instructional setting" (p. 1). The role of task features and task conditions will thus influence the performance in terms of CAF. Specifically, it has been generally found that the design of tasks compels students to focus their attention on certain CAF dimensions but not the three simultaneously (see Foster & Skehan, 1996, and Yuan & Ellis, 2003, to name a few). Particularly, Garcia-Ponce et al. (2018) assert that complexity and accuracy tend to compete during task performance. More frequent are beneficial effects on complexity and fluency or on accuracy and fluency. A possible explanation for these results may be limitations in students' attentional capacities (Foster & Skehan, 1996; Larsen-Freeman, 2009; Skehan, 2009; Skehan & Foster, 1999). To explain these limitations, two models have been proposed: Robinson's (2003) Cognition Hypothesis and Skehan's (2009) Limited Attentional Capacity.

The first model explains that students have opportunities to use multiple sources of attention which are influenced by the complexity of a task, and thus, students can promote both high linguistic complexity and accuracy (Robinson, 2003). The second model proposes that students have limited attentional resources in L2 acquisition which will not allow them to attend to both form and meaning when performing a cognitively demanding and complex L2 task. In line with these models, Skehan and Foster (2012) contend that "different task features, or different task conditions, exert systematic influences on performance, and that if one conceives of performance in terms of complexity, accuracy, and fluency, many individual or combined effects are possible" (p. 201). This means that if complexity and accuracy are competing for

attentional resources, then it is likely that only one element will show elevated performance. Thus, students must prioritise one of these language dimensions over the others (Bamanger & Gashan, 2015). According to Skehan and Foster (2008), it is possible that the levels of complexity and accuracy, which often compete during performance, increase by giving students opportunities to plan their oral contributions.

This assertion is relevant for the purpose of this study because task repetition is considered to be a form of planning which helps students get familiar with the task at hand and thus promote the language areas which normally compete during task performance (Garcia-Ponce & Tavakoli, 2022). This is supported by Bui (2014), who maintains that task repetition involves a kind of planning because performing a task at one time requires implicit planning. This idea of planning "will increase the degree of familiarity concerning the content or procedure of future tasks" (Arredondo-Tapia & Garcia-Ponce, 2021, p. 48).

As suggested above, a growing amount of research is conducted to explore the behaviour of the CAF dimension, taking into account several factors, such as task types, planning, contexts, proficiency levels, and MALL, to name a few. In this study, we draw on assertions that a task repetition design and MALL practices can be beneficial for promoting an engaging atmosphere for learning (Krueger, 2014) and thus improving language production (Robertson & The Le@rning Federation, 2009). Moreover, we focus only on fluency and accuracy in this study, without complexity, because research evidence suggests that during unfamiliar and complex tasks that require high levels of attention, students prioritize either fluency or accuracy (Garcia-Ponce et al., 2018), but not both simultaneously, during task performance. However, we expect that with a task repetition design, the students will be able to promote both language areas as the weeks go by. Therefore, the objective is to examine the behaviour of students' oral fluency and

accuracy during a narrative task which is considered to be cognitively challenging (see Garcia-Ponce et al., 2018) and which was repeated at weekly intervals on WhatsApp.

Mobile-Assisted Language Learning and Task Repetition

The use of technology today has recently become natural in our everyday lives as we use it for personal, academic and professional reasons. In pedagogic contexts, some teachers have experienced how

> ICT [information and communication technologies] solutions can be used as a support for different classroom activities, group-work, and pair-work assignments; for independent work; for enforcing student-centered learning and the principles of individualization; forming one's personal opinion and being able to express it on topical issues. (Mullamaa, 2010, p. 38)

The use of MALL also has these learning benefits. As stated by Ahmadpour and Hossein Yousefi (2016), MALL is a learning tool highly dependent on technology and provides an intermediary that enables interlocutors to communicate with each other at a distance, that is, language learning that is assisted or enhanced using handheld mobile devices. MALL has significantly transformed language teaching and learning (Kukulska-Hulme, 2009; Ahmadpour & Hossein Yousefi, 2016). This digital mode has evolved to support students' language learning with the increased use of mobile technologies. Through mobile devices, students can benefit from synchronized or real-time communication to convey their meaning and interact to complete their learning tasks (Ahmadpour & Hossein Yousefi, 2016).

So far, much research has demonstrated that the use of MALL not only engages students with their learning but increases their motivation as well as they have more significant improvement in language learning (studies) than those that do not use MALL (GencIlter, 2009; Liu & Chen, 2014; Motallebzadeh et al., 2011). MALL can also promote collaborative learning. This is often carried out

by the use of Web 2.0 or 3.0 technologies such as social media platforms or applications developing language skills collaboratively. In the field of SLA, a growing amount of research shows the impact of mobile technology on language learning. Considering this, we used WhatsApp as a MALL environment, taking advantage of the cross-platform messaging service and allowing us to promote the participant students' oral production and investigate how their fluency and accuracy behave in a task repetition approach in this study. Drawing on the findings of Tavakoli and Foster (2008), which show that task repetition is beneficial for learner performance, we thus expect higher levels of both fluency and accuracy to be found after they repeat the task and get familiar with its design and characteristics. This expectation is supported by literature which is discussed below.

For decades, researchers have attempted to understand how the design and implementation of tasks can be directed towards promoting language performance and learning (Ahmadian, 2012). In this sense, task repetition has been a practice which is believed to promote the link between language production and development (Bygate & Samuda, 2005). Task repetition can be performed by asking students to repeat the same or a slightly modified task (Ahmadian, 2012). It can also be conducted by asking students to repeat tasks with similar content or repeat tasks with the same procedure (procedural repetition) but with different content (Ellis, 2009). When students are asked to repeat a task, they accomplish it in a way that they repeat the task with the same content at weekly intervals (Ahmadian, 2012). This repetition is thus considered as preparation for further performances of the same task or tasks with different content (task procedural repetition; Ellis, 2005). According to Arredondo-Tapia and Garcia-Ponce (2021),

> To handle the task at hand, this preparation allows students to simultaneously focus their attention on the message content, scan their memory and seek appropriate language resources for use. This first

encounter enables them to establish familiarity with the task and/or content. (p. 48)

It is this familiarity with the task that enables students to perform other similar tasks more efficiently (Bygate, 1999). This is supported by Ahmadian (2012), who contends that

> by repeating the same or similar tasks, therefore, students might be able to build upon what they have already done in order to 'buy time' not only to do mental work on what they are about to communicate but also to access and (re)formulate words and grammatical structures more efficiently, effectively, and accurately. (p. 380)

If we consider the above claims, there may be many benefits in repeating tasks. Specifically, when students repeat a task, they are also provided with planning time because task repetition facilitates implicit planning which will increase the students' familiarity with the content and design of subsequent tasks. Based upon the above, we can thus claim that task repetition is considered planning because performing a task at one time involves implicit planning which will increase the degree of familiarity concerning the content or procedure of future tasks (Bui, 2014).

The relevance of this is that, according to Ahmadian and Tavakoli (2010), fluency and other language areas are significantly developed. These benefits have motivated a high number of experimental studies with the purpose of investigating the relationship between task repetition and L2 production (e.g., Bygate, 1996; Larsen-Freeman, 2006). In general, it has been found in these previous studies that task repetition can have a beneficial impact on different language areas, such as the CAF dimensions. However, some trade-off effects have been reported (Ahmadian & Tavakoli, 2010), and this has yielded inconsistent findings concerning complexity and accuracy. The reported evidence has thus far shown that there are consistent findings regarding the development of fluency in task repetition.

Arredondo-Tapia and Garcia-Ponce (2021) conducted a study in the same context of the present study using a task repetition design to promote students' fluency and accuracy. The student participants were asked by the researchers to repeat narrative tasks with similar procedure but different content (procedural task repetition). Specifically, at weekly intervals, the participants had to watch a video, and based upon the audio-visual input, they had to narrate the stories in written form for five minutes without any planning opportunities. Their evidence indicates that the students' fluency and accuracy increased as the sessions progressed when the students claimed that they were familiar with the content. The opposite was observed when the students responded that the content of the videos was unfamiliar to them. Lambert et al. (2017) examine the relationship between task repetition and 32 EFL learners' fluency, indicated by speech rate, frequency of clause-final and mid-clause filled pauses, and overt self-repairs at three proficiency levels. The results indicate that the students' fluency tended to increase as their participants repeated the task.

Finally, Ahmadian and Tavakoli (2010) also explored the relationship between task repetition and 60 students' language performance. In this study, they considered four conditions to investigate this relationship: (1) careful on-line planning without task repetition; (2) pressured on-line planning with task repetition; (3) careful on-line planning with task repetition; and (4) pressured on-line planning without task repetition. Based on silent classic films, the students had to narrate the film under the condition that was assigned to them. Interestingly, the results show important increases regarding fluency, accuracy, and complexity.

If we consider the above research evidence, we can claim that task repetition can have an impact on students' oral and written performance. As shown in this research, there are no consistent findings. The reason for this is that several task types, conditions, and learner-related factors are considered motivating varied results. However, the evidence also suggests that task repetition can be used as a practice to promote students' performance.

Specifically, task repetition is useful for assisting students in focusing their attention on the meaning (fluency) and form of their utterances, although with some trade-off effects as reported in the research literature.

In this study, we thus look at the effect of task repetition on students' fluency and accuracy using a narrative task using WhatsApp as a pedagogical tool to encourage interaction.

Method

The present study followed a quantitative design using simple calculations to compare the results of the participants across four sessions in which the narrative task was repeated. To ensure comparability of the results among the small number of participants and across the sessions, the measures of fluency and accuracy are reported in percentages and ratios. Specifically, the study was exploratory in nature since it relies on measures to examine the behaviour of student fluency and accuracy during the performance of a narrative task at the four weekly intervals on WhatsApp. The research objective was to investigate the behaviour of students' fluency and accuracy as they performed a narrative task which was repeated four times and weekly intervals on WhatsApp. Drawing on the findings of Tavakoli and Foster (2008), it is thus expected that as the students practice the task and get familiar with its design and characteristics, their fluency and accuracy levels will generally tend to rise as the weeks (one session each) go by.

Context and participants

The study took place in a language centre at a large Mexican university with approximately 34,000 students at bachelors, masters, and doctorate levels with over 150 programs offered across various disciplines. Although Spanish is the main language of instruction, there is a strong emphasis on enhancing English language skills across different divisions to promote upward mobility and upskilling in the job market. In this context, students take English classes for different academic and personal reasons. Most participants were studying English in this context because English is a graduation requirement in most BA and BSc programs. The English courses offered at the university cover a range of proficiency levels from Level 100 English (A1 of Common European Framework of References, CEFR) to Level 800 English (approximately B2 of CEFR), eight levels in total. Courses are offered from Monday to Thursday, which is five hours of weekly English instruction (1 hour and 15 minutes every day) and a total of 80 hours of instruction per semester. Recently, the administration of this university decided to offer all language courses online using Teams or Zoom as platforms to teach foreign languages.

To contact the participants, first, we established communication with an EFL teacher for English Level 700. We explained the study to her and obtained her authorization to contact the participants. On Zoom, we presented the project to two English classes at an intermediate level of the same teacher. In total, 21 students accepted to participate in the study and signed a biodata sheet and consent form in which we again explained their participation. To control the variable of proficiency, we administered the grammar section of First Certificate of English from the Cambridge ESOL examinations. Seven students were found to have a similar proficiency level according to the results of the grammar test; thus these seven students were the participants for the study. Table 1 shows the key information of the students.

Table 1 illustrates the participants' biographical information, such as age (a range of 21–28 years old), gender (four males and three females), education (different BA and BSc programs), frequency of their written practice (one writing activity per week), and estimated time studying English. This information was gathered from the biodata sheet. In the study, we used codes to refer to the participants and protect them from identification. During the study, the participants knew their

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Table 1 Participants' Biographical Information

Participant Code	Age	Gender	BA and BSc Areas	Time Studying English
P1	22	M	Economics	3 years
P2	21	M	Industrial Engineering	2.5 years
P3	22	F	Economics	2.1 years
P4	24	M	Physics Engineering	2.5 years
P5	21	F	Economics	2 years
P6	22	M	Physics Engineering	2.5 years
P7	28	F	Economics	3 years

right to withdraw from the study at any time and to ask for any information regarding the study.

Instrument of narrative task

For this research, we were interested in a narrative task since narrative tasks are considered to be cognitively demanding but useful in promoting students' language creativity and production (Garcia-Ponce et al., 2018). Given the purpose of the current study, we focus on a monologic narrative task in which speakers can take advantage of the time available to them to produce the language as they process input from a visual source and retrieve language information from the long-term memory to perform the task at hand. For the purpose of students producing language during the task, we considered the use of monologue defined as a production of sequences by one speaker. Therefore, the seven participants were told that during the performance of the task, they had to narrate what they saw on a sequence of images.

Regarding the details of the task, the narrative task used for this study was taken from the study of Garcia-Ponce et al. (2018). The reason for this was because their study and the task were implemented in the same context with intermediate students with similar linguistic and academic characteristics. The narrative task consisted of six drawings which followed a sequential series of images and can be considered to be somewhat complex due to its possible use of several cognitive resources. The drawings show the story of two boys looking for shelter because it started to rain. Next, the boys found a haunted house. The last drawing displays the two boys finding out that they interacted with a ghost during the night they spent in the house. These drawings were taken from an intermediate level textbook. The participants were asked to narrate the story in their own words without any planning.

Previous research (e.g., Garcia-Ponce et al., 2018; Robinson, 2001) suggests that narrative tasks are difficult to perform because they require processes to interpret visual input, retrieve vocabulary from long-term memory and place it in the working memory for use, and formulate their oral production simultaneously.

Data collection and analysis procedures

Following the claim that narrative tasks are complex in nature (Robinson, 2001) and create interaction of language performance areas (Garcia-Ponce et al., 2018), we used the same narrative task following a task repetition design. Since it was not our intention to disrupt the online environment of the English class, we informed the teacher of the purpose of the study and requested her to provide the student participants with the instructions to perform the task, including those who were not selected for the study. The participants were asked to perform the narrative task at weekly intervals as a monologue on WhatsApp. To collect the data, the teacher invited all the participants to record their narratives of approximately two-three minutes using WhatsApp. The recordings were used for analysis purposes of the study, but the teacher also provided feedback to the students as part of her class dynamics.

Only the recordings of the seven students selected for the study were utilized and considered for the analysis. To do this, the teacher sent us the recordings of these students every week. We then

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processed the recordings; that is, we transcribed the oral production of the students and segmented the data to AS-units (Foster et al., 2000) and clauses for each of the seven participants. The recorded data sent to us every week were then subject to a coding process for fluency and accuracy measures.

In accordance with Foster (2020), fluency can be measured using different metrics reported in the literature. Because fluency can be measured by means of total number of syllables per minute (Skehan, 1998), we counted the total number of participants' syllables (unit of production) in their narratives and then divided them by the total number of minutes. The rationale behind this choice is that this temporal measure of fluency is considered reliable to reflect performance speed and the degree of automaticity in L2 speakers' speech (Foster, 2020; Kormos & Denes, 2004; Tavakoli, 2019).

To measure accuracy, we considered a global measure of percentage of error-free clauses. Specifically, we segmented all the clauses in each transcription and then identified the clauses that did not contain any errors in syntax, morphology, and lexis (Yuan & Ellis, 2003). After identifying the error-free clauses, we then calculated the percentages by counting the total number of error-free clauses and dividing the resulting number by the total number of clauses and multiplying the result by 100. To ensure comparability of the results among participants and across sessions, the measures of fluency and accuracy are reported in percentages and ratios for each performance per task. The results for the fluency and accuracy measures of the task performance across the four sessions are provided in the following section.

Results

To answer the research question on what the behaviour of the students' fluency and accuracy levels is during the performance of the narrative task on WhatsApp in four sessions in weekly intervals, the measures of fluency and accuracy are

Table 2 Participants' fluency levels in the four sessions

| Session	P1	P2	P3	P4	P5	P6	P7
S1	12.5	14.3	12.1	13.7	11.2	16.1	14.3
S2	13.5	14.5	13.3	14	15.6	18.9	15.2
S3	11.2	10.2	14.8	20.1	22.2	19.1	16.1
S4	15.6	18.8	15.2	22.4	24.3	20.2	18.3

presented in ratios and percentages for each performance per session. The results are summarized in tables, but since the aim of this study is to show the behaviour of the two dimensions during the performance of the narrative task across the sessions, we also include graphs to represent visually how the dimensions behaved and interacted.

Table 2 displays the results obtained from the analysis of the participants' fluency levels across the repeated sessions.

As can be seen from Table 2, the participants' fluency levels tended to fluctuate significantly in the four sessions. If we compare Session 1 with Session 2, we can see that there were some participants' fluency levels which increased slightly. For example, P5 had a fluency level of 11.2 (syllables per minute) and then 15.6 in the second session. This was the case of most participants; however, P3's and P4's fluency levels did not increase significantly in the second session. If we compare the third session with the previous ones, we can see again that most participants' fluency levels showed a steady increase. For example, P3, P6, and P7 showed fluency levels which increased as the three sessions progressed.

Interestingly, P4 and P5 were the participants who showed the highest levels of fluency in this third session. However, in the case of P1 and P2, their fluency levels showed a considerable decline in the third session. This evidence implies that fluency decreased because of other factors despite the fact that the participants had repeated the same narrative task in three occasions. What is interesting from the data in this table is that all participants showed fluency levels that increase steadily if we

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Figure 1 Behaviour of fluency

Figure 2 Behaviour of accuracy
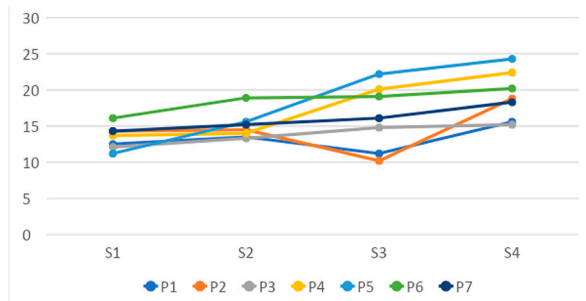
compare the first and the fourth sessions. This trend can be clearly seen in Figure 1.

We can see in Figure 1 that there was significant fluctuation regarding the fluency levels in the sessions. Particularly, it is in the third session where we can observe the highest amount of variability, including some decreases in terms of fluency levels (P1 and P2). However, this figure shows that fluency generally tended to increase as the weeks went by. This then shows that fluency was promoted as the students repeated the narrative task to retell the story that they saw on the images.
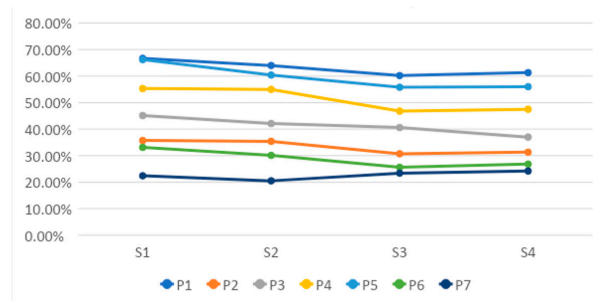
However, the case of accuracy was different in the four sessions. As we might expect, there was significant variability in terms of the accuracy levels in the sessions, but the participants' accuracy did not increase as the session progressed. Table 3 shows the accuracy levels in the four sessions.

From Table 3, there was a significant fluctuation in terms of accuracy levels across the sessions. Also, in comparing Session 1 with Session 2, there was a steep decrease in most of the participants' accuracy levels, but in general, the data in Table 3 shows a general decrease in terms of accuracy in Session 2. If we compare Session 2 with

Session 3, it is apparent that the accuracy levels again decreased in the third session. By examining Sessions 3 and 4, there was a slight rise in the accuracy levels in the fourth session, except from P3's accuracy which fell slightly. In general, what stands out from Table 3 is that accuracy decreased as the sessions progressed. Thus, it implied that the participants tended to be oriented towards the fluency of their utterances which in turn also fluctuated during the repetition of the same task in the four sessions. This tendency is shown in Figure 2.

As shown in Figure 2, the participants' accuracy levels decreased considerably as the sessions progressed. Comparing Figures 1 and 2, the participants' fluency was promoted over accuracy. These results bring up intriguing questions regarding the interaction of fluency and accuracy during a task which was not familiar to the students and was then repeated on four occasions on WhatsApp. This surprising result might be a result of the participants' agency and what they consider as priorities to perform the task at hand.

Discussions

This exploratory study was designed to examine the behaviour of seven students' fluency levels during a narrative task which was repeated four times on WhatsApp. Following Skehan's (2003) contention that students' oral performance can be improved if they are given opportunities to become familiar with the design of tasks, we initially hypothesized that as the participants practice the narrative task and become familiar with its design

Table 3 Participants' accuracy levels in the four sessions

Session	P1	P2	P3	P4	P5	P6	P7
S1	66.70%	35.70%	45.10%	55.30%	66.20%	33.10%	22.40%
S2	64.00%	35.40%	42.10%	55.00%	60.40%	30.10%	20.50%
S3	60.20%	30.70%	40.60%	46.80%	55.80%	25.60%	23.40%
S4	61.30%	31.30%	37%	47.50%	56.00%	26.80%	24.20%

and characteristics, their fluency and accuracy levels would rise as the sessions progress.

The study found that the participants' fluency levels behaved dynamically across the four sessions. The highest dynamism tended to occur in the second and third sessions. This shows the dynamic nature of fluency from a longitudinal perspective. As suggested by Arredondo-Tapia and Garcia-Ponce (2021), when students repeat tasks, they are in the process of becoming familiar with the task design, and this has an impact on significant variability in fluency and other dimensions. As expected, it was in the first session in which we observed the lowest levels of fluency. This finding can be explained by the fact that students in this context do not often narrate stories based on sequential images, and this has an impact on the low levels of fluency (Arredondo-Tapia & Garcia-Ponce, 2021). This is also supported by Qiu (2019), who contends that students' fluency (and accuracy) levels decrease when students perform tasks that are not known to them.

The most important result was that fluency steadily increased as the sessions progressed despite the slight decreases that tended to occur in Sessions 2 and 3. The finding which emerged from the analysis is that fluency appeared to increase as the participants repeated the narrative task on WhatsApp. This finding aligns with the studies of Khezrlou (2020), Lambert et al. (2017), and Lynch and Maclean (2000, 2001), which all showed that task repetition increased both fluency and accuracy. For example, Chang (1999) reports findings which indicate that familiarity with a task topic could enhance fluency.

Thus, in this study, we could observe that task repetition conducted on WhatsApp could promote higher levels of fluency but not accuracy (see below). Based upon this evidence, we therefore suggest that task repetition may be beneficial for promoting fluency if students are given opportunities to repeat complex and challenging tasks on WhatsApp which are challenging and complex

in their design. This is supported by Arredondo-Tapia and Garcia-Ponce (2021), who claim that content familiarity may help students produce more fluent and accurate because this information may assist them in reducing the cognitive load, allowing students to perform the task focusing on meaning and form.

Perhaps the most unexpected finding is the behaviour of accuracy across the four sessions, the levels of which varied significantly. However, it was possible to see that the participants' accuracy progressively fell as the four weeks went by. These findings are somewhat surprising given the fact that task repetition is believed to be a useful practice to promote students' performance. This evidence then suggests that fluency was developed as the student repeated the task, but this compromised their accuracy. It is possible that the students prioritized fluency at the expense of accuracy.

Research evidence has suggested that accuracy (and complexity) compete(s) with other language dimensions during performance (Skehan, 2009). In line with this, Ahmadian and Tavakoli (2010) explain that tasks which are always focused on meaning compel students to prioritize meaning (fluency) over form (accuracy and complexity). Thus, the fact that the participants were able to repeat the narrative task at weekly intervals seems to have enabled them to shift their attention to more fluent oral production (Bygate, 1996), but the output had varied and generally lower levels of accuracy.

Taken together, the above results suggest a potential relationship with fluency, accuracy, task repetition, and WhatsApp. That is, task repetition conducted on WhatsApp appears to have been beneficial for raising higher levels of fluency as the session progressed, but this impacted on varied and generally low accuracy levels. The results of this study thus raise important questions about the factors that compel the students to prioritize fluency over accuracy despite the repetition

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design of the narrative task on WhatsApp. This evidence suggests that task repetition on WhatsApp can be a practice which could be beneficial for developing fluency. This in turn indicates that there must be other more pressing factors which hinder students from promoting accuracy at the same level that they did with fluency.

Conclusions

The primary objective of the study was to investigate the behaviour of students' fluency and accuracy as they performed a narrative task which was repeated four times and weekly intervals on WhatsApp. The rationale behind this decision is that task repetition and MALL can be useful for encouraging student oral production. In previous research conducted in the context of the study, it was found that students' fluency and accuracy tended to decrease as complexity was significantly promoted (Garcia-Ponce et al., 2018). We therefore focused on fluency and accuracy, trying to replicate that previous study with the difference of following a task repetition and MALL design. Since the students had the opportunity to repeat the same task four times, we expected their cognitive load to then be reduced and thus their attention would be focused on both fluency and accuracy.

However, despite the fact that we followed a task repetition and MALL design, the students' fluency and accuracy varied significantly in the sessions. Moreover, the students' fluency was the only dimension which tended to increase as the sessions progressed. In the case of accuracy, we found that it tended to decrease. This evidence suggests that the combination of both task repetition and MALL designs helped students to develop greater fluency, but this had an impact on generally low accuracy levels across the sessions.

Because of the exploratory nature of this short study, one of its limitations is that it was unable to determine the extent to which the online environment played a role in the behaviour of the fluency and accuracy dimensions on WhatsApp.

Thus, more research evidence is needed to show whether the combination of both task repetition and MALL designs can be beneficial for developing fluency during tasks which are considered to be demanding cognitively. Also, we need to continue investigating how accuracy can be promoted during tasks in which this language dimension tends to decrease. In the future, more participants could be invited to increase the number and explore if the same or similar results are found. However, this study provides support to previous research which has shown that language dimensions may interact during the performance of tasks even if we provide students with planning opportunities as in the case of task repetition.

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