Original Article

University of Birjand

Applied Linguistics Inquiry

Fall 2025, Vol. 3, No. 2, pp. 69-81

Applied Linguistics Inquiry

https://doi.org/10.22077/ali.2025.9328.1141

Investigating the Differential Effects of Task Repetition and Task Rehearsal on Immediate and Delayed Oral Performance of EFL Learners with Low Working Memory Capacity

Mobin HassanzadehTaleshi[1*]
Masoud Khalili Sabet[2]
Amir Mahdavi Zafarghandi[3]

[*1]Ph.D. Candidate in Applied Linguistics, Department of English Language and Literature, University of Guilan, Guilan, Iran
[2,3]Associate Professor of Applied Linguistics, Department of English Language and Literature, University of Guilan, Guilan, Iran

ARTICLE HISTORY

Received: 04 May 2025
Revised: 24 June 2025
Accepted: 07 August 2025
Published: 30 September 2025

CORRESPONDING AUTHOR

E-mail: m_hassanzadeh@webmail.guilan.ac.ir

ABSTRACT

Task-based instruction has gained significant attention in second language research, particularly in how task conditions impact learner performance. This study examined the differential effects of repetition and rehearsal, two distinct task-readiness conditions, on the immediate and delayed L2 performance of EFL learners with low Working Memory Capacity (WMC). A quasi-experimental design was employed to address the research questions. Four instruments were utilized: the Oxford Placement Test (OPT), a WMC test, a practice task, and a main task. Thirty-eight EFL learners were randomly allocated to two groups, each exposed to a distinct readiness condition—rehearsal or repetition. Participants were selected from an intermediate-level English course at a private language institute using convenience sampling and then randomly assigned to the two conditions. Both groups accomplished an oral task twice, with the rehearsal group being aware of the second performance in advance, while the repetition group had no such awareness. Task performances were evaluated based on Complexity, Accuracy, and Fluency (CAF). The results indicated that although both conditions positively influenced task outcomes, only the rehearsal group showed statistically significant improvements across all CAF dimensions in both immediate and delayed performances. These results contribute to the growing body of research on individual differences in task-based learning by demonstrating that rehearsal is a more effective readiness strategy than repetition for EFL learners with low WMC. This finding can inform instructional design and classroom practice in contexts where cognitive load is a concern.

***KEYWORDS*:** task repetition, task rehearsal, working memory capacity, oral performance, oral reproduction, EFL learners

1. Introduction

In the past few years, task-based language teaching (TBLT) has garnered significant attention for its potential to enhance L2 learners' performance and acquisition. A substantial body of research has explored the influence of task implementation conditions, such as task repetition and rehearsal, on L2 oral and written production (Abdi Tabari et al., 2024; Mostafaei Alaei & Mansouri, 2024). Within this field, task planning has emerged as a critical construct, especially after Ellis (2005) introduced his taxonomy of planning, which was later expanded by Bui (2014). Bui's framework distinguishes between task-external readiness (e.g., task rehearsal and strategic planning) and task-internal readiness (e.g., task repetition and topic familiarity). Task rehearsal and task repetition are both recognized as significant preparation strategies; however, they diverge in a crucial aspect: the learners' awareness of the impending task repetition. Task rehearsal entails informing learners in advance about upcoming performance,

Cite this article: Hassanzadeh Taleshi, M., Khalili Sabet, M. & Mahdavi Zafarghandi, A. (2025). Investigating the differential effects of task repetition and task rehearsal on immediate and delayed oral performance of EFL learners with low working memory capacity. *Applied Linguistics Inquiry*, *3*(2), 69-81. https://doi.org/10.22077/ali.2025.9328.1141

enabling them to strategize properly, while task repetition requires executing the task without prior information (Bui, 2014; Ellis, 2019).

Bui and Yu (2021) assert that pre-task knowledge may guide students' focus to the preparation phase of subsequent speech performances, particularly concerning Levelt's (1989) formulation stage. This technique may result in substantial improvements in CAF. The distinction between task rehearsal and task repetition is essential, since students' anticipation of subsequence performance may directly affect their methodology towards the task. During task rehearsal, the anticipation of future repetitions allows learners to treat the first enactment as a preparatory phase, potentially enhancing their focus on key elements of the task, such as CAF (Bui & Yu, 2021; Ellis, 2018a). In contrast, task repetition, where learners are unaware of subsequent performances, may lead to a different type of engagement with the task.

This distinction is particularly relevant for learners with low WMC, who often struggle with managing task complexity and cognitive load during performance (Mostafaei Alaei & Mansouri, 2024). Pre-task awareness, as in task rehearsal, could help these learners allocate their cognitive resources more effectively, particularly during speech planning and production stages (Bui & Yu, 2021). By guiding their attention toward key aspects of performance, task rehearsal could mitigate the cognitive overload that low-WMC learners may experience, allowing them to achieve better outcomes compared to task repetition, where no such preparation is provided.

2. Literature Review

2.1. Theoretical Background

Skehan's (2014a) Limited Attentional Capacity (LAC) framework provides a significant explanation for L2 task performance. This concept posits that, unlike native speakers who possess parallel processing capabilities, L2 students have constrained attentional capacity and hence engage in serial processing during language creation. Due to processing constraints, several performance factors compete for available resources. Consequently, learners will struggle to focus on all aspects of language concurrently and will need to choose one aspect over another (Ellis, 2009; 2018b), often resulting in difficulties in L2 output. LAC contends that readiness circumstances might help learners surmount their attentional constraints and achieve a more equitable performance regarding CAF.

Planning has been the primary interpretation of preparing students for a task in the TBLT literature. Bui (2014), and Ellis (2019) asserted that task preparation extends beyond planning, including several additional factors that facilitate learner readiness for a task. Bui (2014) contended that planning had two significant constraints. This approach is constrained by its narrow focus, since it just encompasses supplementary time for students' preparation, either before or during a task. However, other choices exist, including different forms of familiarity with the topic, task, and method, which do not need additional time for readiness but intrinsically equip learners for task execution. Secondly, in Ellis's planning taxonomy, the ideas of task repetition and task rehearsal have been utilized interchangeably. Bui (2014, 2019) modified Ellis's categorization by introducing the comprehensive idea of task preparedness, which encompasses both external factors that represent explicit or intentional readiness, and internal variables that are perceived as implicit or unintentional readiness.

2.2. Empirical Research on Task Repetition and Rehearsal

Task repetition is a form of planning (Ellis, 2009), that entails the repetition of a task in a language learning context (Bygate, 2018). Bygate and Samuda (2005) define task repetition as "asking language learners to repeat the same or slightly modified task after a certain interval, such as one or two weeks" (p. 43). This repetition is an additional opportunity provided by the teacher for language learners. The existing research on task repetition indicates that it can have a highly significant positive impact on the performance of L2 learners in oral tasks, particularly in relation to measures of CAF (Bui, 2019; Fukuta, 2016; Lambert, 2017; Thai & Boers, 2016). One potential explanation is that people may possess sufficient time for cognitive processing, enabling them to meticulously formulate the language they would like to utilize to successfully convey the core aspects of their message. This may subsequently decrease the cognitive burden on their working memory (WM), hence enhancing communication efficacy (Ellis, 2003).

Although task repetition seems like a straightforward concept, there are differences in the ways that it is put into practice. The kinds, intervals, and frequency of repetition of the operationalizations determine their classification. Patanasorn (2010) introduced three different kinds of repetition. Depending on whether a task requires repeating the content, the technique, or both, several forms of repetition apply. Previous studies (Bygate, 2001; Lynch & Maclean, 2000) have shown that learners' overall complexity and accuracy are positively impacted by both procedural and content repetition. However; It has not been discovered that task repetition produces statistically significant gains in every aspect of language output. Various studies have shown differing outcomes on the impact of various operationalizations of repetition.

According to Kim and Tracy-Ventura's (2013) research, accuracy and syntactic complexity are improved by the repetition of tasks and processes. Fukuta (2016) looked at learners' attention direction in relation to task and procedural repetition in research. The findings indicated that, in contrast to procedural repetition, task repetition yielded superior performance for accuracy and lexical diversity. The aforementioned findings indicate that learners are not inherently motivated to concentrate their attention on certain elements of the task under repetition conditions.

The literature presents variations in task conditions with regard to the time intervals between repeated sequences. According to Bui (2019), repetition may be classified into three overarching temporal operationalizations: multiple task repetition spanning extended intervals, intervaled task repetition, and immediate task repetition. Lynch and Maclean (2000) performed research in which second language learners were instructed to deliver poster presentations at 6 intervals to various interlocutors. The study's results revealed that intermediate-level learners had superior performance with regard to both fluency and accuracy. In a different investigation, Wang (2014) instructed participants to engage in a subsequent storytelling task, whereby they were required to recount a narrative to an imagined audience immediately after their first narration, which included the use of source material in the form of a video-based tale. The results indicated improvements in the dimensions of CAF.

In research conducted by Lambert (2017), students were engaged in a series of aural-oral activities, which were repeated six times. The findings demonstrated that repeating these tasks led to an improvement in speech fluency. Prior research has also examined the use of massed task repetition with varying time intervals ranging from one day to ten weeks. Ahmadian and Tavakoli (2011) and Fukuta (2016) examined the impact of task repetition on CAF with a one-week space between the performances. Nevertheless, the findings of these investigations produced conflicting outcomes. Ahmadian and Tavakoli (2011) identified advantages in all three domains of speech production, but Fukuta (2016) noted enhancements only regarding lexical variety and accuracy. Fukuta (2016) further noted that the effectiveness of accurate task repetition surpassed that of procedural repetition.

The frequency of repeats, or the quantity of times a task is performed, has also been inconsistently studied in task repetition research. In their respective studies, Bygate (2001), Wang (2014) and Bui (2019) utilized a single-task repetition protocol with their students. The results of these investigations consistently showed enhancements in fluency and complexity, with Wang's (2014) study further revealing a positive impact on accuracy. This finding implies that a single repetition may be enough to elicit familiarity with the task or topic, hence promoting readiness within the task itself, resulting in an overall improvement in performance. Extensive repetition in studies is more likely to uncover minor impact on CAF or the trajectory of changes in CAF, hence facilitating the identification of the ideal repetitions number to enhance language learning. For instance, Lambert (2017) reported that during the first three performances, participants' speaking rates significantly increased. However, when it ended after the sixth performance, it was evident that this improvement was just temporary.

As stated earlier, the manner in which task repetition is operationalized exhibits variability with regard to task type, repetition type, interval duration, and frequency of repetition. Consequently, this disparity has posed challenges in comparing the findings of various research. There is little research particularly investigating the extent to which learners are aware (have the foreknowledge) of future performances. This is perhaps because previous studies have frequently used task repetition (including uninformed learners), interchangeably with rehearsal (including informed learners).

In a study conducted by Ellis (2005), a review was carried out on articles that were deemed to be focused on rehearsal. The predominant research addressed in Ellis's review, such as those conducted by Gass (1999) and Bygate (1996, 2001), examined task repetition prior to task rehearsal. The concept of rehearsal in this context corresponds with that articulated by Bui (2014), Bui and Yu (2021), and Ellis (2019). Bui (2014) emphasized the difference between task rehearsal and task repetition, with the primary distinction being based on the individual's awareness (foreknowledge) of "whether one knows if s/he is going to do the task again" (p. 67). Task repetition constitutes a form of implicit planning, referred to as task-internal preparedness, based on Bui's theoretical framework on task readiness. This allows learners to potentially gain advantages from being familiar with the topic and procedures involved. task rehearsal offers explicit planning possibilities, referred to as task-external preparedness, allowing learners to prepare for future performances.

2.3. Working Memory

WM is defined as a sophisticated cognitive mechanism that temporarily retains and processes knowledge while concurrently managing activities such as verbal communication (Baddeley, 2017). It acts as "an interface between perception, long-term memory, and action" (Baddeley, 2003, p. 829). For instance, when a second language learner participates in a narrating task, they hold a mental representation of what they have seen in their WM and try to find suitable linguistic forms to express it. This cognitive process relies on the WM system (Ahmadian, 2013).

The triadic framework of WM, proposed by Baddeley and Hitch (1974), has been extensively used in second language research. This model consists of three essential components: the phonological loop, which stores phonological information and aids in vocabulary acquisition in a new language (Baddeley, 2003); the visuo-spatial sketchpad, which retains visual and spatial information; and the central executive oversees attention and orchestrates essential functions including encoding, storage, processing, and retrieving of information (Huitt, 2003). The episodic buffer, a novel element of the model, operates as a short-term storage mechanism with limited capacity that synthesizes data gathered from many sources (Baddeley, 2003).

Barrett (2004) described WMC as "the number of items that can be recalled during a complex WM task." Studies indicate that WMC is essential for everyday cognitive functions (Ahmadian, 2013). Variations in individuals' WMC (e.g., high vs poor) result in differences in cognitive tasks, including verbal communication (Kane, 2007). L2 learners with higher WMC exhibit superior allocation of cognitive and attentional capabilities to novel knowledge, hence enhancing their efficacy in completing speaking tasks. For example, high WMC learners tend to speak more fluently and with greater monitoring of their output (Rosen & Engle, 1997). On the other hand, low WMC learners often make more errors in speaking due to limited capacity to attend to and process information, which underscores the need to support their retrieval of linguistic information to enhance fluency (Nielson, 2014).

WMC may be assessed by complicated span tasks, including the Speaking Span Task (SST), which evaluates the storing as well as processing capabilities of second language (L2) learners' WM (Juffs & Harrington, 2011). The SST is particularly advantageous as it involves both the retention of information (e.g., recalling a sequence of words) and its processing (e.g., forming grammatically and semantically correct sentences with every word), therefore serving as a close representation of WMC (Daneman, 1991; Daneman & Green, 1986). Daneman (1991) asserted that the SST provides a dependable assessment of speech output and language fluency.

Research in the realm of task-based performance examined the correlation between WMC and the CAF triad of L2 learners within the context of task repetition. Ahmadian (2013) explored the effect of memory capacity on the mediation of task repetition for the CAF triad among 42 second language learners. They executed an oral narrative task on two occasions with a 2-week interval between them. Their oral performance was evaluated based on L2 CAF. Findings demonstrated learners with higher WMC in L2 exhibited greater fluency and accuracy than those with lower WMC.

In another study, Muhammadpour (2023) investigated the impact of various task repetition schedules on the oral CAF of second language learners with different degrees of WMC. The research included 36 intermediate learners, categorized into two groups according to their WMC: task repetition for high and low WMC learners. Both groups executed a silent animation narrative task, then engaging in quick repetition. They were instructed to repeat the assignment three days and one week later, without rewatching the cartoon. The learners' oral task performances were documented and evaluated for CAF measures. The findings indicated that varying task repetition schedules significantly influenced low-WMC learners, who exhibited considerable enhancements in lexical variety (complexity) with time. The findings underscore the educational importance of utilizing varied task repetition schedules to enhance the oral performance of L2 learners with high and low WMC.

3. The Current Study

Previous studies have demonstrated a substantial link between WMC and the cognitive academic language proficiency of language learners' oral task performance. Specifically, individuals with high WMC often outperform those with low WMC in these cognitive ability framework (CAF) categories. Nonetheless, no study has examined whether changing task implementation settings may improve oral task performance in L2 learners with low WMC. It is plausible that foreknowledge of an upcoming task could mitigate the potential impact of WMC on learners' oral CAF. Additionally, there has been no investigation into whether varying task implementations lead to measurable improvements over time in low WMC L2 learners. Therefore, the current study aimed to expand current research by examining the differential effects of task repetition and task rehearsal on the oral task production of EFL learners with low WMC. The research focused on key performance measures, including CAF, to determine whether the learners benefit more from task rehearsal or task repetition. Additionally, the study assessed the immediate and delayed impacts of both task implementation conditions, providing insights into their long-term effects on L2 performance. This study attempted to address the subsequent research questions:

1. Do task repetition and task rehearsal have differential effects on the immediate oral performance of EFL learners with low working memory capacity?
2. Are the gains (if any) in task repetition and task rehearsal maintained when the exact same task is repeated after one week interval?

4. Methodology

4.1. Design

This study was conducted inside a quantitative framework with a quasi-experimental design marked by a between-subjects structure. Since random assignment of individuals from pre-existing intact classrooms was not practical, a quasi-experimental design was thought appropriate (Creswell & Creswell, 2018; Mackey & Gass, 2015). In this study, two experimental groups were subjected to distinct task-readiness conditions (task repetition vs task rehearsal) to assess their impact on oral performance. The dependent variable was oral task performance, assessed by CAF. The independent variable was the kind of task preparedness, while WMC served as a mediating variable.

To guarantee internal validity, group equivalence was established using the Oxford Placement Test (OPT), and individuals were paired according to their low WMC scores utilizing a validated speaking span task. Extraneous factors, including previous subject knowledge, instructional content, and instructor input, were controlled by using identical materials, topic prompts, and time allocations for both groups (Dörnyei, 2007). To enhance external validity, a representative sample of intermediate EFL learners was chosen, and tasks were administered in a classroom setting that mirrored standard pedagogical settings (Anderson-Cook, 2005). Data collection happened during four sessions, during which participants' task outputs were audio-recorded, transcribed, and evaluated according on specified CAF criteria.

4.2. Participants

The study's target population included male intermediate-level EFL learners enrolled at the English language institute in Guilan, Iran. These students were registered in preparation classes for critical English proficiency assessments, including IELTS. The

sampling method included convenience sampling from an initial cohort of 85 students, from which a homogenous sample was derived based on their OPT results (Allan, 2004). Learners with OPT scores between 120 and 149 were identified as intermediate and included in the study. From this eligible pool, participants with low WMC were identified using a validated Speaking Span Task. Following established criteria in previous research (Hestvik, 2012; Zhou, 2017; Muhammadpour, 2023), learners with WMC scores of 18 or below were categorized as having low WMC.

This process yielded a final sample of 38 male learners, aged 16 to 20, reflecting the gender-specific structure of language institutes in Iran. All participants had approximately six years of EFL learning experience and attended biweekly sessions of 90 minutes each (see Table 1). The sample size of 38 was established based on previous quasi-experimental research in TBLT and WMC (e.g., Bui, 2014; Hassanzadeh-Taleshi et al., 2023; Hsu, 2019; Muhammadpour, 2023), which employed similar group sizes (n=13–20 per group) to identify significant impacts on oral task performance. Thirty-eight candidates were selected at random and assigned to one of two groups: task rehearsal (n = 19) or task repetition (n = 19).

Table 1.

Participants' Descriptive Information

Groups	Number	OPT score *M (SD)*	Age *M (SD)*	Year of study *M (SD)*
Task rehearsal	19	132.94 (6.17)	18.16 (1.30)	2.45 (0.11)
Task repetition	19	133.11 (6.38)	18.05 (1.43)	2.42(0.17)
Total	38	133.02 (6.28)	18.11 (1.36)	2.75 (0.19)

4.3. Instruments

4.3.1.Research Instruments

4.3.1.1. Oxford Placement Test (OPT)

The OPT, designed by Allan (2004), has two parts: grammar and listening, each including 100 multiple-choice questions. In the listening section, students were tasked with identifying specific words they heard, such as distinguishing between similar-sounding words like "oarsman" and "horseman." The grammar section primarily focused on assessing learners' understanding of standard verb tenses and sentence structure. The allotted time to complete the test was sixty minutes. The reliability of this test is supported by a high Cronbach's alpha score (α = .94), indicating strong internal consistency (Geranpayeh, 2003). It has been extensively used in similar research to ensure participant homogeneity.

4.3.1.2. Working Memory Capacity (WMC) Test

The evaluation of WMC was performed with a speaking span task modified from Daneman (1991). There was one trial set and five blocks of word sets in this task. The word count in each set varied from 2 to 6, incrementally intensifying the requirements on the students' WM. Each set of words was shown to the participants, and they were given 60 seconds to come up with a sentence that used those words correctly in terms of grammar and meaning. The assignment consisted of 100 prevalent English terms, each including two syllables and seven letters. For one second, a computer screen displayed every word from the set. Following the disappearance of the last word, participants saw a prompt represented by a question mark, signifying the start of the sentence creation phase. Two metrics were used to assess the learners' WM: the span score and the overall score. The span score indicated the maximum number of words with which the participant could effectively construct sentences, whilst the total score denoted the words quantity accurately used from a potential 100. The scoring procedure aligns with prior validated implementations (e.g., Hestvik et al., 2012; Zhou, 2017).

4.3.2.Instructional Materials

4.3.2.1. Practice Task

Students were shown a *Tom and Jerry* animation for 36 seconds as the practice task. Their task was to watch the show and then, in a monologue style, tell the story of it. The format of the practice task was identical to that of the main task, but the substance was different. This helped the students get habituated to the big project, reduce their anxieties, and feel more at ease throughout.

4.3.2.2. Main Task

The main task was a 3-minute silent Tom and Jerry animation with a meticulously constructed and systematically arranged narrative used in many prior investigations (e.g., Bei, 2013; Bygate, 2001; Hassanzadeh-Taleshi et al., 2023). Following the video presentation, each student was required to recount the tale monologically, without the opportunity to get criticism from

classmates or the instructor. The reason for this was that their verbal output originated from their own speaking abilities rather than the collaborative building of language exchanged during dialogic encounters with peers (de Jong et al., 2012). The researchers' goal in employing a silent animation was to prevent students from utilizing any language that may negatively impact their speaking ability (Bygate, 2001). Additionally, narrative tasks were employed in earlier pertinent investigations (Ahmadian, 2012; Hassanzadeh-Taleshi et al., 2023; Muhammadpour, 2023), which increased the comparability of the findings of this study.

4.3.3.Performance Measures

Participants' oral task outputs were assessed using well-established CAF measures (see Table 2), as suggested by Ellis and Barkhuizen (2005) and employed in numerous empirical studies (Ahmadian, 2011; Bui & Skehan, 2018; Hsu, 2019; Muhammadpour, 2023). Rater calibration and inter-rater reliability were ensured using Cohen's Kappa, with disagreements resolved through discussion. Both immediate and delayed task performances were analyzed to capture short-term and sustained effects of the interventions.

Table 2

Measures of CAF Based on Ellis and Barkhuizen (2005) and Bui and Skehan (2018).

Complexity measures	Accuracy measures	Fluency measures
• "Amount of subordination: It is calculated by dividing the total number of AS-units by the total number of independent clauses." • "Number of different verb forms: the number of various verb forms that are used." • "Mean length of AS-units: the total number of words divided by the total number of AS-units."	• "Percentage of error-free clauses: the number of error-free clauses divided by the total number of clauses multiplied by 100." • "Percentage of error-free AS-units: the number of error-free AS-units divided by total number of AS-units multiplied by 100." • "Percentage of target-like verbal morphology: the number of correct finite verb phrases divided by the total number of verb phrases multiplied by 100."	• "Speech rate A: the total number of syllables produced in each narration divided by the total number of seconds took to complete the task and multiplied by 60." • "Speech rate B: the total number of meaningful syllables (i.e., excluding dysfluencies) produced in each narration divided by the total number of seconds took to complete the task and multiplied by 60."

4.4. Data Collection Procedure

Data were collected over four sessions within three weeks (see Table 3 for an overview). This duration was deemed sufficient based on prior studies examining short-term task readiness effects (e.g., Ahmadian & Tavakoli, 2011; Fukuta, 2016; Bygate, 2001), and was designed to capture both immediate and delayed impacts of task rehearsal and repetition.

In session one, all participants completed a background questionnaire and took the OPT to assess their English language proficiency.

In session two, the participants first completed the Speaking Span Task (SST) to assess their WMC. Based on their scores, those identified as having low WMC proceeded to perform the practice task. For this task, all participants watched a brief silent Tom and Jerry animation and were then asked to retell the story in English in a monologic format, without any time limitations. This session was designed to reduce potential performance anxiety and to familiarize learners with the procedures and expectations of the main task.

In session three, each group received their respective treatments:

- Task Rehearsal Group: Participants were informed beforehand that they would be asked to perform the main oral task twice. They watched a 3-minute silent *Tom and Jerry* animation and narrated the story. After a brief break, they were asked to repeat the same task. This foreknowledge allowed for strategic rehearsal.
- Task Repetition Group: Participants performed the same task without being informed that they would repeat it. After watching the same animation and narrating the story, they were unexpectedly asked to do it again within the same session. This ensured that any planning was incidental.

In session four (delayed task performance), held one week later, all participants in the both groups were asked to retell the same story again, without prior notice. This session was designed to measure the retention of performance gains under both conditions. All oral performances were individually audio-recorded using handheld recorders.

Table 3

Summary of the Procedures

Week	Experimental stage	Participants	Stages
Session 1	Test	All	• Oxford Placement Test (Allan, 2004) • Background survey
Session 2	Test Practice	All	• Speaking Span Task (Daneman, 1991) • Performed practice task
Session 3	Treatment	All	• Performed main task • Repetition
Session 4	Treatment	All	• Repetition

4.5. Data Analysis

Initially, the researchers transcribed all the data, and 15% of the transcripts were randomly chosen. Two researchers split and classified them according to CAF metrics. The inter-rater reliabilities of the measures were evaluated and appeared at an acceptable level ($\alpha > .7$) (Cohen, 2013). Subsequently, one of the researchers evaluated the remaining transcriptions.

The Statistical Package for Social Sciences (SPSS) version 27 (IBM Corp, 2020) was used to assess the differences between groups for complexity, correctness, and fluency. The prerequisites for conducting independent sample t-tests were verified, confirming both the equality of variance and the normality the data. Furthermore, all observations were mutually independent. The three questions' CAF measurements were subjected to a number of independent t-tests.

5. Results

5.1. Research Question One

To investigate the effects of task rehearsal and task repetition on the immediate oral performance of EFL learners with low WMC, participants' narratives were transcribed and analyzed using established measures of CAF. The data were collected immediately after the implementation of the two task conditions, and independent-sample t-tests were conducted to compare the performance of the two groups (Table 4).

In terms of complexity, the results showed significant differences between the two groups for the amount of subordination ($t(38) = 3.527$, $p = .001$), number of different verb forms ($t(38) = 2.526$, $p = .016$), mean length of AS-units ($t(38) = 2.158$, $p = .016$), and lexical diversity ($t(38) = 3.898$, $p = 0.001$).

Regarding accuracy measures, results of independent t-tests indicated significant differences for error-free clauses ($t(38) = 6.444$, $p = .001$), error-free AS-units ($t(38) = 2.459$, $p = .019$), and correct verb forms ($t(38) = 2.688$, $p = .011$) with the task rehearsal group outperforming the task repetition group.

Finally, in terms of fluency, the rehearsal group again demonstrated superior performance. The results demonstrated significant differences between the two groups for speech rate A ($t(38) = 2.974$, $p = .005$) and speech rate B ($t(38) = 2.071$, $p = .046$). Consequently, the opportunity for immediate task rehearsal enabled the learners to generate more intricate, precise, and fluent English compared to those in the task repetition group.

Table 4.

Differences in CAF on Immediate Repetition between the Two Groups

		M (SD)			
	Variables	**Task Rehearsal**	**Task Repetition**	***t***	***p***
Complexity measures	Amount of subordination	1.41 (.14)	1.25 (.13)	3.527	.001
	Number of different verb forms	8.15 (2.00)	6.73 (1.40)	2.526	.016
	Mean length of AS-units	10.11 (1.57)	9.08 (1.33)	2.158	.016
	Lexical diversity	65.36 (6.99)	55.88 (7.96)	3.898	.001
Accuracy measures	Error-free clauses	68.63 (7.61)	52.96 (7.37)	6.444	.001
	Error-free AS-units	56.26 (12.59)	46.43 (12.04)	2.459	.019
	Correct verb forms	68.36 (15.73)	55.76 (13.01)	2.688	.011
Fluency measures	Speech rate A	137.11 (24.99)	116.61 (16.67)	2.974	.005
	Speech rate B	121.11 (26.00)	106.19 (17.58)	2.071	.046

5.2. Research Question Two

To examine the potential long-term effects of the rehearsal and repetition conditions, a delayed post-task performance was conducted during the fourth session—one week after the initial task. The same narrative task was used, and oral outputs were transcribed and analyzed using the same CAF framework. Independent-sample t-tests were again applied to the delayed performance data (Table 5). Significant differences in favor of the rehearsal group were observed for all CAF measures ($p < .05$), mirroring the immediate task outcomes. These findings indicate that the observed performance trends persisted even after a one-week interval between tasks.

Table 5.

"Differences in CAF between the Two Groups after One Week"

		M (SD)			
	Variables	**Task Rehearsal**	**Task Repetition**	***t***	***p***
Complexity measures	Amount of subordination	1.43 (.21)	1.27 (.21)	2.874	.007
	Number of different verb forms	8.05 (1.77)	6.73 (2.07)	2.097	.043
	Mean length of AS-units	10.63 (1.20)	9.20 (1.42)	3.015	.003
	Lexical diversity	64.17 (7.19)	58.06 (4.59)	3.340	.002
Accuracy measures	Error-free clauses	61.23 (6.63)	53.45 (8.54)	3.134	.003
	Error-free AS-units	57.90 (10.75)	50.08 (10.08)	2.312	.027
	Correct verb forms	66.48 (14.01)	55.38 (12.47)	2.578	.014
Fluency measures	Speech rate A	132.73 (20.48)	117.93 (22.13)	2.139	.039
	Speech rate B	122.13 (18.96)	106.12 (19.49)	2.565	.015

6. Discussion

The research questions in this study focused on whether significant differences existed between the impact of task rehearsal and task repetition on oral performance of the learners with low WMC, as evaluated by the CAF metrics. The results revealed a clear distinction: learners who engaged in task rehearsal demonstrated significant improvement across all CAF dimensions from the first to the second task performance, whereas learners in the task repetition group, despite showing some progress, did not exhibit statistically significant changes in any CAF subcomponent over time. This outcome highlights the nuanced differences between rehearsal and repetition, which are often treated as similar in previous research, yet produce markedly different effects on task outcomes."

Moreover, the findings underscore that rehearsal, characterized by pre-task awareness of future repetitions, is more effective than repetition, where learners are unaware of subsequent performances. When learners are explicitly aware that they will repeat a task (explicit preparedness), they achieve better results than those who engage in task repetition without prior knowledge (implicit preparedness). This supports the notion that awareness fosters deeper cognitive engagement and enhances L2 development (Leow, 2019), aligning with research that reported greater learning gains in conditions where learners were aware of upcoming tasks compared to those where they were not (Kachinske, 2015).

"These findings further lend support to Ellis's (2019) prediction that pre-task awareness heightens learners' attention to the linguistic encoding of their message, or in terms of Levelt's (1989) model of speech production, a greater focus on the formulation stage. As Ellis (2019) suggests, when learners are aware of future performances, they are more likely to allocate cognitive resources to refining the linguistic form of their message, which leads to improved performance on subsequent attempts. In this study, learners' awareness of the upcoming task allowed them to focus more intensively on the formal aspects of language, such as syntactic complexity, accuracy, and lexical variety, thus enhancing their overall performance. This is consistent with Wang's (2014) assertion that when learners find it easier to encode their conceptual message into language, they can dedicate more cognitive resources to refining their sentence and utterance formulation, resulting in greater gains in complexity and accuracy."

A further explanation for the superior performance in the rehearsal group could be the opportunity for learners to reflect on their initial task performance during the one-week interval between tasks. Knowing that they would perform the task again may have prompted participants to engage in informal rehearsal, reflecting on what they could improve upon for their second attempt. This reflective process could have functioned as an informal intervention, helping learners consciously learn from their previous mistakes and apply those insights to improve their future performance (Bui & Yu, 2021). This reflection aligns with theoretical perspectives that suggest intervals between repeated performances provide learners with opportunities to cognitively process their initial attempts, allowing them to focus more on language form and improve their output (Ellis, 2016; Ellis, 2020; Lynch, 2018). As such, pre-task awareness and the interval between performances likely served as powerful cognitive tools that enhanced learners' ability to produce more accurate, complex, and fluent language during the second task performance.

Moreover, previous research highlights the role of learners' self-reflection as an informal yet powerful instrument

between performances, often leading to improved task results, especially in accuracy (Kartchava & Nassaji, 2019; Khezrlou, 2021). Even though self-reflection is not traditionally considered a formal pedagogical instrument, it is proved to effectively guide learners' attention to linguistic form (Dao, 2021), that is a critical element in intervention strategies between task performances (Ellis, 2016).

In this study, the improvements observed in both syntactic and lexical complexity under rehearsal conditions suggest that pre-task awareness facilitated a more effective planning process for the second task performance. This planning allowed learners to develop a more organized and sophisticated interlanguage (Housen et al., 2012b). Complexity, often linked to interlanguage restructuring, reflects changes and development within the learner's linguistic system (Skehan & Foster, 1999). This research, in contrast to several others that indicate no impact of task repetition on accuracy, revealed substantial improvements in both particular accuracy and global accuracy. Although simultaneous enhancement across all CAF dimensions is uncommon in TBLT, it is not unprecedented. Skehan (2014b) observed that research has investigated methods to improve performance in all aspects by meticulously manipulating task selections and circumstances to alleviate attentional constraints. Empirical research demonstrates the potential for enhancements in CAF measures when task repetition is coupled with a degree of readiness. Numerous research (e.g., Ahmadian & Tavakoli, 2011; Bui, 2019; Wang, 2014) indicate improvements in all areas of CAF under these settings, signifying a favorable result.

Ellis (2019) posited that for task repetition to significantly affect accuracy, a form-focused intervention between performances is crucial. The accuracy gains observed in this study support this view, as pre-task awareness likely prompted learners to engage in self-reflection, functioning as an implicit form of intervention. Furthermore, the accuracy improvement may be explained by participants intentionally carrying over "rehearsed" elements into the second performance, recognizing that their first attempt was preparatory for the main task. This awareness may have triggered their monitoring mechanisms, as suggested by theoretical models of language production, encouraging learners to strive for more accurate output (Bui & Yu, 2021). These accuracy gains also suggest that rehearsal helped learners select and apply appropriate linguistic forms to their pre-verbal messages, enabling them to overcome cognitive limitations and refine their L2 system.

Regarding fluency, the significant improvements indicate that awareness of the upcoming task helped learners consolidate and proceduralize their L2 knowledge, allowing for greater control over oral articulation and written expression (Housen et al., 2012b; Skehan, 2014b). This supports the notion that rehearsal facilitates the proceduralization of linguistic knowledge, which is critical for fluent performance.

An unexpected finding was the lack of significant improvement in the repetition group across the CAF dimensions. While this contradicts much of the existing literature, it aligns with study by Kobayashi (2022), where participants engaging in identical task repetition failed to show meaningful progress. A plausible explanation for this outcome may lie in the characteristics of the repetition task itself. According to Ellis (2020), precise task repetition may be suboptimal in task-based instruction since it might result in adverse learner perceptions, often linked to sensations of tedium or disinterest (Hu, 2018). Unlike learners in the rehearsal group, who anticipated the second task and viewed it as an opportunity to improve (Bui & Yu, 2021), those in the repetition condition may have perceived the task as monotonous, resulting in a lack of motivation to perform better on their second attempt.

7. Conclusion

This study aimed to explore how two task-readiness conditions—task rehearsal and task repetition—differ in their impact on the immediate and delayed oral performance of EFL learners with low WMC. The research showed that, via rigorous assessments of CAF, although both conditions may enhance learner performance to a degree, task rehearsal resulted in consistently superior improvements. The improvements were seen not only in immediate performance but also persisted one week later, indicating a more enduring effect of practice on language development.

This study's findings significantly enhance the field of second language acquisition by elucidating the interaction between task implementation conditions and cognitive learner variables, such as WMC. Although the notion of task repetition has been extensively examined, limited research has distinctly differentiated between repetition and rehearsal, especially among low-WMC learners. This study elucidates the ongoing debate by demonstrating that rehearsal, which entails prior knowledge of a repeated task, enables learners to engage in more profound planning, thereby alleviating the cognitive load during task execution. This theoretical differentiation is essential for developing more efficient and cognitively adaptive language instruction.

The findings highlight the significance of task introduction and sequencing in educational settings. Language instructors, particularly those instructing students with potential WM difficulties, need to use rehearsal as a tactical instrument. Merely notifying learners that they will revisit a task later, regardless of content consistency, may markedly alter their preparatory mindset, resulting in enhanced verbal performance. In contrast to spontaneous repetition, rehearsal engages conscious planning, potentially bolstering learners' confidence and alleviating task-related anxiety, so enhancing their overall oral performance.

This research underscores the potential of rehearsal as a realistic, cost-effective solution in educational environments. Rehearsal, requiring no further materials or technology, may be seamlessly incorporated into many teaching situations, making it especially advantageous in environments with limited resources or substantial class numbers. It also offers potential for personalized education, as educators may customize rehearsal activities according to students' cognitive profiles.

The results extend beyond the classroom, suggesting that curriculum designers and teacher trainers should include the

idea of task preparedness—both internal and external—into training modules and language learning programs. This will enable instructors to transcend conventional notions of repetition and embrace more sophisticated task design concepts rooted in cognitive science and substantiated by empirical data.

The study also presents other opportunities for further investigation. Future research may investigate the comparative efficacy of rehearsal against other forms of pre-task preparation (e.g., strategic planning, online planning), or how its impact differs across various task genres, skill levels, or instructional modes such as online education. Additional research is necessary about the interplay between learners' emotional factors—such as anxiety or motivation—and cognitive preparedness in affecting performance results.

8. References

Abdi Tabari, M., Khezrlou, S., & Ghanbar, H. (2024). Task repetition versus task rehearsal: Understanding effects of task-readiness factors and elemental genres on L2 writing task performance. *Language Teaching Research, 0*(0). https://doi.org/10.1177/136216882412496

Ahmadian, M. J. (2011). The effect of 'massed'task repetitions on complexity, accuracy and fluency: does it transfer to a new task?. *The Language Learning Journal, 39*(3), 269-280. https://doi.org/10.1080/09571736.2010.545239

Ahmadian, M. J. (2012). The relationship between working memory capacity and L2 oral performance under task-based careful online planning condition. *TESOL Quarterly, 46*(1), 165–175. https://doi.org/10.1002/tesq.8

Ahmadian, M. J. (2013). Working memory and task repetition in second language oral production. *Asian Journal of English Language Teaching, 23*(1), 37-55. https://muse.jhu.edu/article/537825

Ahmadian, M. J., & Tavakoli, M. (2011). The effects of simultaneous use of careful online planning and task repetition on accuracy, complexity, and fluency in EFL learners' oral production. *Language Teaching Research, 15*(1), 35-59. https://doi.org/10.1177/1362168810383329

Allan, D. (2004). Oxford Placement Test 2. Oxford University Press.

Anderson-Cook, C. M. (2005). Experimental and Quasi-Experimental Designs for Generalized Causal Inference. *Journal of the American Statistical Association, 100*(470), 708-718. https://doi.org/10.1198/jasa.2005.s22

Baddeley, A. (2003). Working memory and language: An overview. *Journal of Communication Disorders, 36*(3), 189–208. https://doi.org/10.1016/S0021-9924(03)00019-4

Baddeley, A. (2003). Working memory: Looking back and looking forward. *Nature Reviews Neuroscience, 4*(10), 829–839. https://doi.org/10.1038/nrn1201

Baddeley, A. D. (2017). The concept of working memory: A view of its current state and probable future development. In A. Baddeley (Ed.), *Exploring working memory: Selected works of Alan Baddeley* (pp. 99–106). Routledge.

Baddeley, A. D., & Hitch, G. J. (1974). Working Memory. In G. Bower (Ed.), *The Psychology of Learning and Motivation: Advances in Research and Theory* (pp. 47–89). Academic Press.

Barrett, L. F., Tugade, M. M., & Engle, R. W. (2004). Individual differences in working memory capacity and dual-process theories of the mind. *Psychological bulletin, 130*(4), 553. https://doi.org/10.1037/0033-2909.130.4.553

Bei, G. X. (2013). Effects of immediate repetition in L2 speaking tasks: A focused study. *English Language Teaching, 6*(1), 11-19. http://dx.doi.org/10.5539/elt.v6n1p11

Bui, G. (2014). Task readiness: Theoretical framework and empirical evidence from topic familiarity, strategic planning, and proficiency levels. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 63-94). John Benjamins.

Bui, G. (2019). Task-readiness and L2 task performance across proficiency levels. In Z. Wen & M. Ahmadian (Eds.), *Researching L2 task performance and pedagogy: In honour of Peter Skehan* (pp. 253–277). John Benjamins.

Bui, G., & Skehan, P. (2018). Complexity, accuracy, and fluency. *The TESOL Encyclopedia of English Language Teaching, 1–7*. https://doi.org/10.1002/9781118784235.eelt0046

Bui, G., & Yu, R. (2021). Differentiating task repetition from task rehearsal. In N. Sudharshana & L. Mukhopadhyay (Eds.), *Task-based language teaching and assessment* (pp.119–137). Springer Nature Singapore.

Bui, G., Ahmadian, M. J., & Hunter, A.-M. (2019). Spacing effects on repeated L2 task performance. *System, 81*, 1–13. https://doi.org/10.1016/j.system.2018.12.006

Bygate, M. (1996). Effects of task repetition: Appraising the developing language of learners. In J. Willis & D. Willis (Eds.), *Challenge and change in language teaching* (pp. 136–146). Macmillan.

Bygate, M. (2001). Effects of task repetition on the structure and control of language. In M. Bygate, P. Skehan, & M. Swain (Eds.), *Task-based learning: Language teaching, learning, and assessment* (pp. 22–48). John Benjamins.

Bygate, M. (2018). *Learning language through task repetition*. John Benjamins.

Bygate, M., & Samuda, V. (2005). Integrative planning through the use of task-repetition. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 37–74). Benjamins.

Cohen, J. (2013). *Statistical Power Analysis for the Behavioral Sciences*. Routledge. https://doi.org/10.4324/9780203771587

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Daneman, M. (1991). Working memory as a predictor of verbal fluency. *Journal of Psycholinguistic research, 20*(6), 445–464. https://doi.org/10.1007/BF01067637

Daneman, M., & Green, I. (1986). Individual differences in comprehending and producing words in context. *Journal of memory and language, 25*(1), 1–18. https://doi.org/10.1016/0749-596X(86)90018-5

Dao, P., Chi Nguyen, M. X. N., & Chi, D. N. (2021). Reflective learning practice for promoting adolescent EFL learners' attention to form. *Innovation in Language Learning and Teaching, 15*(3), 247-262. https://doi.org/10.1080/17501229.2020.1766467

De Jong, N. H., Steinel, M. P., Florijn, A. F., Schoonen, R., & Hulstijn, J. H. (2012). Facets of speaking proficiency. *Studies in Second Language Acquisition, 34*(1), 5–34. http://dx.doi.org/10.1017/S0272263111000489

Dörnyei, Z. (2007). *Research methods in applied linguistics*. Oxford University Press.

Ellis, R. & Barkhuizen, G. (2005). *Analyzing learner language*. Oxford University Press.

Ellis, R. (2003). *Task-based language learning and teaching*. Oxford University Press.

Ellis, R. (2005). Planning and task-based performance. In R. Ellis (Ed.), *Planning and task performance in a second language* (pp. 3–34). John Benjamins.

Ellis, R. (2009). The differential effects of three types of task planning on the fluency, complexity, and accuracy in L2 oral production. Applied Linguistics, 30(4), 474-509. https://doi.org/10.1093/applin/amp042

Ellis, R. (2016). Focus on form: A critical review. *Language teaching research, 20*(3), 405-428. https://doi.org/10.1177/1362168816628627

Ellis, R. (2018a). An options-based approach to doing task-based language teaching. In R. Ellis (Ed.), *Reflections on task- based language teaching* (pp. 216–231). Multilingual Matters.

Ellis, R. (2018b). Measuring second language learners' oral performance of tasks. In R. Ellis (Ed.), *Reflections on task- based language teaching* (pp. 128–152). Multilingual Matters.

Ellis, R. (2019). Task preparedness. In Z. Wen & M. Ahmadian (Eds.), *Researching L2 task performance and pedagogy: In honor of Peter Skehan* (pp. 15–38). John Benjamins.

Ellis, R., Skehan, P., Li, S., Shintani, N., & Lambert, C. (2020). *Task-based language teaching: Theory and practice*. Cambridge University Press.

Fukuta, J. (2016). Effects of task repetition on learners' attention orientation in L2 oral production. *Language Teaching Research, 20*(3), 321-340. https://doi.org/10.1177/1362168815570142

Gass, S., Mackey, A., Alvarez–Torres, M. J., & Fernández–García, M. (1999). The effects of task repetition on linguistic output. *Language Learning, 49*, 549–581. https://doi.org/10.1111/modl.12843

Geranpayeh, A. (2003). A quick review of the English quick placement test. *Research Notes Quarterly, 12*, 8–10.

Hassanzadeh-Taleshi, M., Yaqubi, B., & Bozorgian, H. (2023). The effects of combining task repetition with immediate post-task transcribing on L2 learners' oral narratives. *The Language Learning Journal, 51*(2), 133-144. https://doi.org/10.1080/09571736.2021.1901967

Hestvik, A., Bradley, E., & Bradley, C. (2012). Working memory effects of gap-predictions in normal adults: an event-related potentials study. *Journal of psycholinguistic research, 41*(6), 425–438. https://doi.org/10.1007/s10936-011-9197-8

Housen, A., Folkert, K., & Ineke, V. (eds.). (2012b). *Dimensions of L2 performance and proficiency: Complexity, accuracy and fluency in SLA*. John Benjamins.

Hsu, H. C. (2019). The combined effect of task repetition and post-task transcribing on L2 speaking complexity, accuracy, and fluency. *The Language Learning Journal, 47*(2), 172-187. https://doi.org/10.1080/09571736.2016.1255773

Hu, X. (2018). Effects of task type, task-type repetition, and performance criteria on L2 oral production. In B. Martin (Ed.), *Learning language through task repetition* (pp. 143–169). John Benjamins.

Huitt, W. (2003). The information processing approach to cognition. Educational Psychology Interactive. Valdosta, GA: Valdosta State University. Retrieved from, http://www.edpsycinteractive.org/topics/cogsys/infoproc.htm

Juffs, A., & Harrington, M. (2011). Aspects of working memory in L2 learning. *Language Teaching, 44*(2), 137-166. https://doi.org/10.1017/S0261444810000509

Kachinske, I., Osthus, P., Solovyeva, K., & Long, M. (2015). Implicit learning of a L2 morphosyntactic rule, and its relevance for language teaching. In P. Rebuschat (Ed.), *Implicit and explicit learning of languages* (pp. 385–416). John Benjamins.

Kane, M. J., Conway, A. R. A., Hambrick, D. Z., & Engle, R. W. (2007). Variation in working memory capacity as variation in executive attention and control. In A. R. A. Conway, C. Jarrold, M. J. Kane, A. Miyake & J. N. Towse (Eds.), *Variation in working memory* (pp. 21–46). Oxford University Press.

Kartchava, E., & Nassaji, H. (2019). The role of task repetition and learner self-assessment in technology-mediated task performance. *ITL-International Journal of Applied Linguistics, 170*(2), 180-203. https://doi.org/10.1075/itl.19013.kar

Khezrlou, S. (2021). Learners' reflective practice between the repeated performances of tasks: Effects on second language development. *Dutch Journal of Applied Linguistics, 10*, 1-20. https://doi.org/10.51751/dujal9458

Kim, Y., & Tracy-Ventura, N. (2013). The role of task repetition in L2 performance development: What needs to be repeated during task-based interaction?. *System, 41*(3), 829–840. https://doi.org/10.1016/j.system.2013.08.005

Kobayashi, M. (2022). The distributed practice effects of speaking task repetition. International *Journal of Applied Linguistics, 32*(1), 142-157. https://doi.org/10.1111/ijal.12409

Lambert, C., Kormos, J., & Minn, D. (2017). Task repetition and second language speech processing. *Studies in Second Language Acquisition, 39*(1), 167–196. https://doi.org/10.1017/S0272263116000085

Leow, R. P. (2019). ISLA: How implicit or how explicit should it be? Theoretical, empirical, and pedagogical/curricular issues. *Language Teaching Research, 23*(4), 476-493. https://doi.org/10.1177/1362168818776674

Levelt, W. J. (1989). *Speaking: From intention to articulation*. MIT Press.

Lynch, T. (2018). Perform, reflect, recycle: Enhancing task repetition in second language speaking classes. In M. Bygate (Ed.), *Learning language through task repetition* (pp. 193–222). Amsterdam: John Benjamins

Lynch, T., & Maclean, J. (2000). Exploring the benefits of task repetition and recycling for classroom language learning. *Language Teaching Research, 4*(3), 221-250. https://doi.org/10.1177/136216880000400303

Mackey, A., & Gass, S. M. (2015). *Second language research: Methodology and design*. Routledge.

Mostafaei Alaei, M., & Mansouri, A. (2024). Unraveling the differential effects of task rehearsal and task repetition on L2 task performance: the mediating role of task modality. *International Review of Applied Linguistics in Language Teaching*, *1*(1), 1-36. https://doi.org/10.1515/iral-2023-0066

Muhammadpour, M., Hassanzadeh-Taleshi, M., & Salehi-Amiri, F. (2023). The effects of different task repetition schedules on oral narratives of L2 learners with high and low working memory capacity. *Acta Psychologica, 236*, 103933. https://doi.org/10.1016/j.actpsy.2023.103933

Nielson, K. B. (2014). Can planning time compensate for individual differences in working memory capacity?. *Language Teaching Research, 18*(3), 272–293. https://doi.org/10.1177/1362168813510377

Patanasorn, C. (2010). *Effects of Procedural Content and Task Repetition on Accuracy and Fluency in an EFL Contexts*. PhD dissertation, Northern Arizona University, Flagstaff.

Rosen, V. M., & Engle, R. W. (1997). The role of working memory capacity in retrieval. *Journal of Experimental Psychology: General, 126*(3), 211. https://doi.org/10.1037//0096-3445.126.3.211

Skehan, P. (2014a). Limited attentional capacity, second language performance, and task-based pedagogy. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 211–260). John Benjamins.

Skehan, P. (2014b). The context for researching a processing perspective on task performance. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 1–26). John Benjamins.

Skehan, P., & Foster, P. (1999). The influence of task structure and processing conditions on narrative retellings. *Language Learning, 49*(1), 93-120. https://doi.org/10.1111/1467-9922.00071

Thai, C., & Boers, F. (2016). Repeating a monologue under increasing time pressure: Effects on fluency, complexity, and accuracy. *TESOL Quarterly, 50*(2), 369–393. https://doi.org/10.1002/tesq.232

Wang, Z. (2014). On-line time pressure manipulations: L2 speaking performance under five types of planning and repetition conditions. In P. Skehan (Ed.), *Processing perspectives on task performance* (pp. 27–62). John Benjamins.

Zhou, H., Rossi, S., & Chen, B. (2017). Effects of working memory capacity and tasks in processing L2 complex sentence: Evidence from Chinese-English bilinguals. *Frontiers in Psychology, 8*(1), 595-604. https://doi.org/10.3389/fpsyg.2017.00595

پژوهشگاه علوم انسانی و مطالعات فرهنگی
پرتال جامع علوم انسانی