



The Impact of Time Pressure on L2 English Task Performance: A State-of-the-Art Review with Reference to the Saudi EFL Context

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Abstract: Time pressure is a common aspect of academic evaluation and communicative performance; however, researchers continue to debate its impact on second language (L2) acquisition both conceptually and experimentally. Research into second language acquisition (SLA) has provided mixed results. In certain contexts, time pressure might enhance fluency and task efficiency for some, while negatively affecting accuracy, confidence, and deeper processes for others. These differences highlight why it is necessary to conduct a critical analysis of current research that accounts for task features, learner variables, and contextual factors.

This paper presents a critical and comparative review of research on the effects of time pressure on L2 English task performance, with a particular focus on the Saudi English as a Foreign Language (EFL) context. It analyses and contrasts findings from previous studies, highlights inconsistencies in the literature, and proposes directions for future research, including a study designed to address identified gaps. This review collects evidence from studies in applied linguistics and related fields about the positive, negative, and neutral effects of time pressure on reading, writing, and speaking tasks. It further examines theoretical frameworks relating to cognitive load, fluency–accuracy decisions, and task-based language acquisition to clarify the differential impact of time pressure on learners.



This review highlights contextual factors relevant to Saudi higher education, including exam-oriented assessment practices, cultural perceptions of time, and learner stress, all of which may influence Saudi EFL learners' experience of time pressure. Building on these insights, the paper proposes a mixed-methods empirical study designed to examine how time constraints affect learners' reading performance and strategy use by comparing timed and untimed conditions. This review aims to clarify time pressure as a context-sensitive factor whose effects are influenced by learner characteristics, with implications for teaching, assessment design, and future empirical research in second language acquisition (SLA).



1 Introduction

The ability to perform efficiently under time pressure is a primary concern when communicating in academic, professional, or common situations. For learners of English as a second language (L2), time pressure is particularly salient, as it is often integrated into classroom assessments, formal examinations, and real-world communicative situations. Despite its prevalence, the influence of time pressure on L2 performance remains unclear, with empirical studies reporting mixed results (e.g., Awwad & Alhamad, 2021; Thai & Boers, 2015; Panahzadeh & Asadi, 2019; Ghanbari et al., 2015).

In the field of second language acquisition (SLA), time pressure has been associated with both facilitative and detrimental effects on performance (e.g., Awwad & Alhamad, 2021; Thai & Boers, 2015; Panahzadeh & Asadi, 2019; Ghanbari et al., 2015). Several studies have shown that time pressure may enhance concentration, improve fluency, and reduce procrastination by encouraging learners to prioritise overall meaning and task completion over formal linguistic accuracy (e.g., Awwad & Alhamad, 2021; Thai & Boers, 2015; Moore & Tenney, 2012). In contrast, some studies suggest that time pressure may increase stress, reduce accuracy, and limit opportunities for deeper language processing (e.g., Ghanbari et al., 2015; Panahzadeh & Asadi, 2019; Orfus, 2008). Additional studies indicate minimal or no clear effects, suggesting that the influence of time pressure may depend on factors such as task type, learner proficiency, and context (e.g., Ben Maad, 2008; Jaeger & Adair, 2017; Orthey et al., 2019). As a result, the literature presents a fragmented and sometimes inconsistent understanding of the effects of time pressure on L2 performance.

In the context of Saudi Arabia, English is essential for further education and career development. University students are often required to perform reading, writing, and speaking tasks under strict time constraints, particularly in high-stakes examinations. Previous studies have shown that Saudi learners report elevated levels of stress during such examinations and have limited experience with timed communicative tasks in earlier stages of education (e.g., Aloairdhi, 2019; Faruk & Abdul Karim, 2015). These contextual and cultural factors raise important questions about how Saudi English



learners experience and manage time pressure, suggesting that findings from other educational contexts may not be directly generalizable to this context.

Instead of reporting original empirical data, this paper presents a critical and comparative review of research on time pressure in second language acquisition, with particular attention to its relevance within the Saudi English as a Foreign Language (EFL) context. This review aims to explain why the results reported in research differ by integrating theoretical viewpoints and empirical data, while also identifying the critical elements that reduce the impact of time pressure on L2 performance. The paper also outlines future research methods by suggesting an empirical study aimed at examining the responses of Saudi EFL learners to timed and untimed reading tasks.

2 Time Pressure in Second Language Acquisition: Theoretical Perspectives

Understanding the impact of time pressure on second-language acquisition (SLA) requires a theoretical framework that considers thought processing limitations, concentration resources, and task requirements. Time pressure does not function as an independent factor; instead, it interacts with learners' cognitive abilities, language proficiency, and strategic behaviours. Several theoretical frameworks clarify why time pressure may enhance performance in some settings while limiting it in others.

One significant concept is Cognitive Load Theory, which asserts that learners have a limited capacity for working memory during information processing (Sweller, 1988). In L2 tasks, learners must continuously manage language decoding, meaning formation, and task requirements. Applying time pressure may increase the cognitive load, therefore reducing the resources available for accurate and in-depth processing. Consequently, learners may emphasise speed and task completion above grammatical accuracy or complexity. This perspective explains findings that report increased errors and the use of simpler language under time pressure, particularly among lower-proficiency learners (e.g., Ghanbari et al., 2015; Panahzadeh & Asadi, 2019; Thai & Boers, 2015; Wang, 2014).



Closely related to cognitive load is the speed-accuracy trade-off, a concept widely discussed in both psychology and applied linguistics (e.g., Skehan, 2009; De Jong & Perfetti, 2011). This perspective suggests that learners often trade accuracy for increased speed under time pressure. In L2 performance, this trade-off becomes more apparent, as learners must balance rapid processing with the demands of form-focused accuracy. Some learners may benefit from this trade-off by gaining fluency, while others may experience declines in accuracy and overall performance (e.g., Awwad & Alhamad, 2021; Thai & Boers, 2015; Ghanbari et al., 2015). This theoretical framework helps explain the mixed findings reported in the literature, with some studies showing improved fluency under time pressure and others reporting reduced performance quality (e.g., Panahzadeh & Asadi, 2019; Ghanbari et al., 2015).

Time pressure can also be analysed within the framework of Task-Based Language Teaching (TBLT). From a task-based viewpoint, task requirements—such as time pressure—determine how learners arrange their attention during performance. Skehan's concept of limited attentional capacity (2009) claims that learners are unable to focus equally on fluency, accuracy, and complexity at the same time. When under time pressure, learners tend to focus on meaning and fluency, perhaps sacrificing accuracy (Skehan, 2009). In contrast, tasks completed without time pressure may provide learners with enhanced opportunities for planning, monitoring, and self-correction. This approach explains why timed activities could encourage spontaneous language usage, while untimed tasks facilitate more thoughtful, controlled output.

Motivational and affective factors further complicate the relationship between time pressure and performance. Psychological models indicate that little time pressure might enhance motivation and concentration, resulting in increased engagement and task success. This observation corresponds with the U-shaped relationship proposed by Roskes et al. (2013), indicating that moderate pressure may improve performance, whereas extreme pressure results in stress and a decrease in performance. This concept is especially relevant in second language acquisition (SLA) environments, since learners' emotional responses—such as stress or exam anxiety—may significantly affect their performance under time pressure.



Together, all of these theoretical perspectives suggest that time pressure should not be seen as essentially advantageous or disadvantageous. Instead, its effects depend on the interaction between thinking load, task requirements, learner proficiency, and behavioural reactions. This theoretical complexity provides the essential foundation for understanding the various outcomes seen in empirical SLA research and highlights the importance of context-sensitive investigations on time pressure, especially in under examined settings like the Saudi EFL context.

3 Empirical Evidence on the Effects of Time Pressure in Second Language Acquisition

Empirical studies have shown diverse and sometimes conflicting results regarding the impact of time pressure on second language acquisition (SLA), with some reporting facilitative effects on fluency and task performance (e.g., Awwad & Alhamad, 2021; Thai & Boers, 2015), while others highlight negative impacts on accuracy, linguistic complexity, and learner confidence (e.g., Ghanbari et al., 2015; Panahzadeh & Asadi, 2019; Orfus, 2008). A third category of research indicates that time pressure may have minor or no apparent effect, depending on task features and learner characteristics (e.g., Ben Maad, 2008; Jaeger & Adair, 2017; Orthey et al., 2019). To clarify, current findings can be categorized into three main groups: beneficial impacts, negative effects, and the absence of apparent effects.

3.1 Positive Effects of Time Pressure

Several studies indicate that time pressure can improve certain aspects of L2 performance, including fluency and speed. Orthey et al. (2019) reported faster reaction rates in participants performing tasks under time pressures, despite a heightened sense of stress. Ben Maad (2008) also found that time pressures reduced pauses and increased speech rate among EFL learners, signifying enhanced spontaneous oral production. Thai and Boers (2015) further proved that repeated oral tasks performed under increasing time pressure resulted in noticeable improvements in fluency.



Positive outcomes have also been reported in reading contexts. Faruk and Abdul Karim (2015) found that Saudi learners increased their reading speed under time pressure without a decrease in comprehension, suggesting that moderate time pressure may enhance focus and reduce attentional distraction. El-Sherif (2014) similarly reported that participants completed tasks with greater efficiency under time pressure, especially when visual support was available. From a motivational perspective, Kühnel et al. (2023) stated that time pressure can reduce procrastination by creating a sense of urgency that enhances involvement and facilitates task completion.

3.2 Negative Effects of Time Pressure

In contrast, a substantial body of research highlights the negative impact of time pressure on L2 performance. Ahmadian and Tavakoli (2011) demonstrated that learners performing oral activities without time pressure achieved greater accuracy and complexity compared to those performing under pressured conditions. De Jong and Perfetti (2011) also showed that time pressures encouraged reliance on repetition instead of creative language use, thereby restricting options for deeper processing.

Negative results are especially apparent in writing tasks. Kenworthy (2006) indicated a noticeable increase in grammatical errors and a reduced overall quality in essays written under time pressure. Aloairdhi (2019) showed that time pressure harmed planning and revising procedures in Saudi female learners, resulting in heightened writing stress and reduced confidence. Research on speaking performance has connected time pressure with increased stress and reduced fluency (Panahzadeh and Asadi, 2019; Awwad and Alhamad, 2021).

In a broader context, Orthey et al. (2019) observed that time pressure frequently forces learners to choose lower-level thinking strategies, emphasizing task completion rather than clarity or depth. These findings correspond with psychological research demonstrating that extreme pressure reduces attentional concentration and limits higher-order processing (De Paola and Gioia, 2014).



3.3 Absence of Apparent Effects

A third area of research shows low or no significant effects of time pressure on performance. According to Orfus (2008), reminders about remaining time had no significant influence on problem-solving outcomes, while Caudery (1990) noticed no continual differences between timed and untimed essay scores. Moreover, Livingston (1987) similarly reported minimal impact of time pressure on writing quality.

Such findings suggest that the influence of time pressure may be reduced by factors such as task familiarity, learner proficiency, and strategic ability. Time pressure can be minimised by compensating measures developed by experienced students who are used to timed assessments. Differences between pressured and unpressured conditions may occasionally be hidden by ceiling effects in task difficulty, meaning that tasks are too easy to capture variation in learners' performance.

3.4 Synthesis of Empirical Trends

In general, empirical findings suggest that the impact of time pressure on second language acquisition (SLA) depends on contextual factors rather than on what might be logically assumed about its effects. Positive results are typically correlated with enhanced speed, fluency, and task engagement, whereas negative outcomes are linked with reduced accuracy, increased stress, and dependence on basic techniques. Research indicating no apparent effects further emphasizes the significance of limiting factors, including task type, learner experience, and task design. The trends shown in Figure 1 highlight the necessity for context-sensitive research that ignores basic assessments of time pressure as either advantageous or harmful.

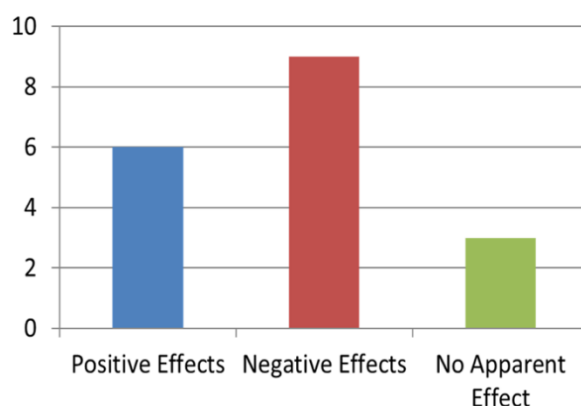


Figure 1. Overview of reported effects of time pressure in previous SLA studies.

This figure provides a brief summary of trends seen in the reviewed literature, emphasizing studies that indicate positive impacts, negative effects, or no apparent impact of time pressure on L2 performance. The figure does not represent original empirical data but rather synthesizes trends identified in previous studies.

4 Time Pressure in the Saudi EFL Context

The influence of time pressure on second language (L2) performance cannot be completely understood without taking into account the educational and cultural context in which learners perform. In Saudi Arabia, English is a required subject in secondary and university education, closely associated with academic development and employment opportunities. Consequently, English assessment practices—many of which are timed—significantly influence learners' experiences, strategies, and attitudes about the language.

Saudi EFL learners are often subjected to high-stakes assessments, i.e., examinations with significant academic consequences, which require speed, clarity, and completion within strict time limits. Reading comprehension tests, specifically, often require that students rapidly analyse unfamiliar texts and answer multiple-choice questions within strict time conditions. Although these techniques aim to evaluate proficiency effectively, they may also increase stress and place further demands on learners who are still developing proficiency in English.



Numerous studies conducted within the Saudi context indicate that time pressure could increase test-related stress and negatively affect performance, particularly among learners with lower proficiency levels. Aloairdhi (2019) indicated that Saudi female learners experienced more stress during timed writing assignments, which affected planning and reduced overall text quality. Moreover, Faruk and Abdul Karim (2015) noted that while certain Saudi learners enhanced their reading speed under time pressure, this improvement did not consistently correlate with stable comprehension across all skill levels. These findings suggest that the impact of time pressure may differ significantly based on learners' linguistic proficiency and experience with timed tasks.

Cultural conceptions of time may influence how Saudi learners respond and react to time pressure. In numerous Arab educational contexts, learning has traditionally emphasized careful study, memorization, and accuracy over fast task completion. Thus, strict time limits may be viewed as externally caused limitations rather than as facilitative tools for enhancing performance. This difference can cause pressure and reduce learners' confidence when performing under time pressure, especially in reading activities that require extended attention and inference.

Meanwhile, recent changes to education in Saudi Arabia that align with Vision 2030 have enhanced exposure to structured exam formats and international standards such as the International English Language Testing System (IELTS). This shift indicates that Saudi learners are progressively gaining familiarity with time-limited evaluations. Nonetheless, basic familiarity does not ensure the effective use of strategies. In the absence of specific training in time-management techniques—such as skimming, scanning, and organizing essential information—learners may rely on less effective coping strategies, like fast reading or making reasonable guesses.

From a pedagogical perspective, analysing time pressure in the Saudi EFL context becomes important. Understanding how learners experience and manage time limitations can enhance assessment methodologies and instructional strategies. Moreover, time pressure should be considered not only as a testing condition but also as a factor that interacts with proficiency, strategic use, and learner behaviour. Investigating these interactions within the Saudi context contributes to a more context-specific understanding of time pressure in SLA, particularly in comparison to findings



from studies conducted in other educational settings. It also highlights the need for instructional support that enables learners to manage timed reading tasks effectively under exam conditions.

5 Reframed Discussion of Prior Findings

5.1 Interpreting Reported Positive Effects of Time Pressure

The reported benefits of time pressure in second language acquisition research are best viewed as conditional results influenced by task and learner factors. Several studies link time pressure to enhanced response speed, improved fluency, and more efficient task completion (e.g., Orthey et al., 2019; Garside, 2020); however, these advantages tend to develop under particular conditions, including lower task difficulty, familiarity with timed tasks, and higher learner proficiency. Instead of improving overall performance, time pressure appears to direct learners' attention toward rapid meaning construction and task completion. While this shift may improve fluency, it does not necessarily lead to improvement in linguistic accuracy, complexity, or long-term language development. Thus, positive outcomes reflect how learners adapt their strategies to task demands, not genuine improvements produced by time pressure itself.

5.2 Understanding Negative Consequences of Time Pressure

A significant amount of research highlights the negative impact of time-limited performance, particularly on accuracy, complexity, and higher-order thinking (e.g., Ahmadian & Tavakoli, 2011; De Jong & Perfetti, 2011). Time pressure reduces chances for planning, monitoring, and revising, causing learners to depend on simpler strategies and basic processing. These impacts are particularly apparent in tasks requiring careful formulation, such as writing and complex reading comprehension (Kenworthy, 2006; Aloairdhi, 2019). In the Saudi EFL context, these effects may be made worse by teaching methods that focus more on finishing exams than on being flexible in strategies, increasing learners' reliance on stress and fear of performance. Negative effects



therefore reflect not only thinking limitations but also wider instructional and evaluative circumstances.

5.3 Explaining Neutral or Inconclusive Findings

Findings indicating limited or no observable effects of time pressure further highlight the diverse nature of its impacts. Studies, such as Orfus (2008), indicate that performance gaps between pressured and unpressured conditions may be confused by factors such as task simplicity, ceiling effects, or learners' prior experience with timed tasks. In such cases, learners may effectively adapt using known strategies for avoiding possible impacts of time pressure. These neutral findings underscore the significance of task sensitivity and learner diversity in result interpretation, cautioning against the assumption of either beneficial or negative effects in isolation. Instead, the findings confirm that time pressure functions as a moderating factor, with its impact shaped by the interaction between task design, learner characteristics, and contextual requirements.

6 Methodological Implications and Proposed Research Direction

The reviewed literature indicates that the impact of time pressure on L2 performance is neither predictable nor uniform, which points to the importance of carefully designed empirical studies. The proposed study aims to conduct an empirical investigation that clarifies existing research by concentrating on Saudi EFL learners within a controlled reading-task framework, in light of the varied findings across task types, learner profiles, and circumstances. This section outlines how insights from previous studies guide the methodological approach of the proposed research and specifies its desired contribution.

6.1 Justification for the Proposed Design

Prior studies indicate that the influence of time pressure is sensitive to task characteristics and the learner's familiarity with limited time. Studies reporting positive



results frequently relate to tasks with lower thinking complexity or to learners familiar with performing under time pressure. In contrast, negative outcomes are more common in tasks requiring advanced processing, such as extensive writing or complex analysis. These findings justify the choice of reading comprehension tasks as the central focus of the planned study, as reading facilitates systematic manipulation of time pressure while keeping control over task difficulty.

Furthermore, several SLA research projects depend on only quantitative performance measures, thereby neglecting learners' personal experiences of time pressure. The proposed study intends to employ a mixed-methods approach to capture both quantifiable performance outcomes (e.g., accuracy and response time) and learners' thoughts, strategies, and thinking responses. This hybrid approach fills in the gaps in the literature by examining thinking and personal elements separately.

6.2 Addressing Methodological Gaps in Prior Research

A constant issue in previous studies is the confusion around how learners manage time pressure in real-life assessment scenarios. While some research examines timed and untimed conditions, fewer studies investigate how learners experience them or change their techniques accordingly. The proposed research addresses this limitation by using post-task questionnaires and focus group interviews, allowing participants to directly reflect on their experiences throughout both pressured and unpressured reading tasks.

A further methodological issue identified in the literature involves order effects and task familiarity. Students may show varying performance mostly due to their familiarity with task forms rather than the limitations of time. To address this concern, the proposed design includes organised task sequencing and similar reading passages, ensuring that any detected differences are more likely to indicate the impact of time pressure rather than getting better with practice.

6.3 Considerations of Gender and Generalisability

Limiting the participant group to female Saudi learners reflects the institutional fact of gender-segregated higher education in Saudi Arabia. This emphasis guarantees



cultural and institutional relevance; however, it also raises inquiries regarding generalisability. Instead of framing this limitation as a methodological weakness, the study considers gender as a contextual boundary, recognising that the results will be most relevant to similar educational environments. This transparency conforms to best practices in applied linguistics research and enables future studies to adapt the design for male groups or mixed-gender contexts for comparative purposes.

6.4 Ethical and Practical Considerations

Ethical considerations are fundamental to the suggested research design. Given the potential stress associated with timed tasks, care will be taken to avoid explicitly framing activities as “time pressure” tasks, in order to prevent unnecessary anxiety or altered task behaviour. This method seeks to reduce performance stress while keeping natural reading behaviour. Participants will be fully informed of their rights, including the option for voluntary participation and withdrawal, and qualitative data will be anonymized to maintain confidentiality.

From a practical standpoint, the use of controlled digital platforms for performing tasks enables reliable evaluation of response times while ensuring similarity across participants. This methodological decision fits into previous SLA research suggestions that emphasise the value of better reliability in recording time-related performance data.

6.5 Contribution to the Field

This research seeks to provide a context-sensitive view on time pressure by placing the proposed study at the meeting points of SLA, evaluation, and educational research. It specifically addresses requests for research beyond generalisations and investigates the interaction between time pressure, learner characteristics, and task design within particular educational contexts. The study aims to offer factual support for pedagogical and assessment-related decisions in Saudi EFL contexts and similar settings.



7 Conclusion and Directions for Future Research

7.1 Implications for Pedagogy and Assessment

This research highlights the necessity for balanced instructional methods that combine both timed and untimed tasks to enhance learners' speed and proficiency. Educators should adopt different strategies that acknowledge the diverse levels of comfort and proficiency among learners when performing tasks under time pressure. This may include employing techniques such as skimming, scanning, organizing, and planning to assist students in managing tasks more efficiently within limited timeframes. Furthermore, task design must not just emphasize speed; it should also include opportunities for deeper processing and thinking, especially in reading comprehension tasks, where accuracy and understanding are essential.

Time-limited problems have become common in the assessment design of major language proficiency examinations, including IELTS and the Test of English as a Foreign Language (TOEFL). However, these assessments may excessively advantage learners who acquire knowledge quickly, while disadvantaging those who need additional time to show their understanding and skills. The results indicate that alternative assessment formats, such as varied time structures or adaptive testing, may more effectively address the need of a wider range of learners, thereby facilitating fairer evaluations that capture both fluency and accuracy.

7.2 Future Directions for Research

The divergent findings from the examined literature provide multiple directions for future investigation. Although current studies offer significant insight into the impact of time pressure on L2 performance, the long-term effects of regular engagement with time-limited activities remain largely unexplored. Long-term studies would be essential to investigate if learners' coping techniques and time-management skills enhance with experience and if the effects of time pressure reduce over time.

Future research may investigate the interaction between individual learner characteristics, including language proficiency, cognitive processing abilities, and



behavioural control, and how these factors influence performance under time pressure. Cross-cultural studies can clarify how learners from other educational systems and cultural contexts react to time pressure, especially in countries with varying perspectives on time management and stress.

The use of technology in language acquisition, including online evaluations and computer-based task management systems, offers new opportunities for exploring how digital platforms may reduce or enhance the impact of time pressure. Research may concentrate on exploiting technology to provide more flexible and adaptable testing environments that address individual learning requirements.

7.3 Future Challenges in the Saudi EFL Context

As the Saudi higher education system evolves to meet worldwide language proficiency standards, it is essential to comprehend the specific challenges encountered by Saudi learners under time pressure. Research, like Aloairdhi (2019), has emphasised the influence of writing anxiety on Saudi learners, indicating that the introduction of pedagogical practices that reduce stress and foster resilience under time pressure may enhance learner confidence and performance.

Future research may investigate the interaction between cultural views regarding time and performance and learners' behavioural responses to time pressure. Specifically, recognising how cultural standards regarding time flexibility influence Saudi learners' perceptions of time pressure and their performance in major assessments will produce valuable insights for developing more culturally aware and effective language learning strategies.

7.4 Closing Reflections

This study has highlighted the significance of an in-depth understanding of the impact of time pressure on L2 learners, especially in the setting of Saudi Arabia. While time pressure may motivate certain learners, it may lead to greater stress, lower confidence, and reduced performance in others. The future task will be to achieve a suitable balance between speed and accuracy in language examinations, as well as to



develop instructional strategies that assist learners in managing time pressure effectively.

Proving how time pressure can serve as a tool to either improve or hinder L2 performance, the present research enhances the understanding of how time pressure influences L2 learning by acknowledging its complexity and examining the contextual factors that shape learners' experiences. As global assessment standards are increasingly adopted by education systems, it is important to understand the impact of time pressure and to improve assessment practices accordingly to ensure fair, equitable, and behaviourally supportive environments for learners

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