A Contrastive Error Analysis of English Preposition Acquisition: Investigating Gender and L1 Interference in EFL Context

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Mastering English prepositions presents a persistent challenge for Saudi EFL learners, largely due to structural and semantic differences between Arabic and English. Despite formal instruction, learners frequently commit errors in prepositional usage, which can hinder overall language proficiency and academic performance. This study aims to investigate the extent to which first language (L1) interference contributes to these errors and to explore whether gender plays a role in prepositional accuracy. The research involved 40 second-year English major students from Majmaah University, using a two-part test (multiple-choice and short-answer) and semi-structured interviews. Quantitative analysis revealed that many errors stemmed from negative transfer from Arabic, especially in cases where Arabic prepositions appear similar but differ in function. Qualitative data confirmed that learners often rely on direct translation and struggle due to limited exposure and insufficient instruction. The findings highlight the need for contrastive teaching approaches and contextualized practice to reduce L1 interference. Implications include revising curriculum design to emphasize prepositional distinctions and integrating targeted support for learners at lower proficiency levels.

Keywords: first language interference, prepositions, Saudi EFL learners, language transfer, error analysis, EFL

INTRODUCTION

Language acquisition and development are complex processes that can be influenced by various factors, one of which is language transfer. Language transfer, also known as interference, refers to the effect that one of the two languages spoken by a bilingual person has on the other. Lado (1964) assesses interference as the deleterious effect of the first language on the acquisition of the second language. Consequently, students who learn English are mostly influenced by this negative transfer because they are, as well as the rule, not an exception. Oldin (1989) thinks that the main reason for

interference is a transfer, which is a practice of applying particular linguistic structures from the first language to the second one. The view of Oldin (1989) is that the linguistic similarities and differences between some languages can influence the acquisition of new linguistic structures like grammar. This can also be considered a reason for the many linguistic problems that Arabic learners usually encounter when they use their Arabic structures in English, which is known as the negative transfer. Therefore, it is quite a problem for Arabic learners of English to get a negative transfer from Arabic, which is a major challenge in the acquisition of English grammar and syntax.

There are several differences in the structure of Arabic and English, including word order, verb conjugation, and preposition usage. A learner of Arabic may have difficulty understanding the nuances and difficulties associated with English grammar and sentence structure because of the structural differences. The area where the Arabic negative transfer of English prepositions is especially clear is in the acquisition of English prepositions. Furthermore, the aim is to identify any differences in how male and female students use their L1 and how it affects their acquisition of English prepositions. Considering how gender affects L1 negative transfer among EFL Saudi learners of English prepositions is significant because it could have a positive impact on language instruction and learning outcomes. Many studies in the field have found that several factors, such as motivation, language proficiency, age, personality type, and gender, have a significant effect on the learners' success in acquiring the language for a long period (Alahmadi & Lahlali, 2019). Hence, this study tries to deal with these gaps by taking the negative transfer from Arabic and gender differences into account when studying the role of English prepositions among Saudi EFL learners. Through the analysis of the common errors of these learners and the impact of gender on prepositional learning achievements, this research intends to contribute valuable insights into the second language acquisition field and language teaching practices.

LITERATURE REVIEW

L1 Interference in Second Language Acquisition

L1 interference, or linguistic transfer, involves the projection of first language (L1) structures onto a second language (L2), leading to deviations (Wringe, 1989). This process, integral to both productive and receptive skills, can result in positive or negative transfer (Wringe, 1989; Skinner, 1957). While not the sole cause of errors, L1 interference requires careful consideration (Bourafai, 2021). Skinner (1957) argues that L1 interference is expected in early L2 learning due to habit formation and structural differences, though learners should still strive for L2 proficiency (Bourafai, 2021). Thyab's (2020) study also highlights significant L1 interference challenges for Arabic-speaking learners acquiring English prepositions and determiners due to structural differences. Errors include article omission and incorrect preposition choice from literal translation, aligning with the Contrastive Analysis Hypothesis (CAH) that predicts negative transfer from L1-L2 structural mismatches.

Negative transfer occurs when L1 linguistic structures are applied to L2, causing errors, particularly with prepositions (Gass & Selinker, 1983). This phenomenon is widespread and impacts proficiency, especially when languages have considerable structural differences (Lado, 1964; Gass & Selinker, 2001). Lado (1964) emphasizes the value of

syntactic analysis to predict transfer difficulties. Selinker's Interlanguage Theory (1972) describes L2 learners' dynamic linguistic system, which incorporates L1 and L2 elements and includes negative transfer errors. This theory allows for analysis of L1 integration into L2 and how individual factors, like gender, influence this development, offering insights into Saudi learners' transitional competence in English prepositions.

Proposed by Robert Lado in the 1950s, CAH posits that L1-L2 structural differences are the primary source of L2 errors, leading learners to transfer L1 rules (Lado, 1964). This is highly relevant for Arabic-speaking Saudi learners and English prepositions, as CAH helps predict difficulties by comparing grammatical structures (Lado, 1964). Rooted in behaviorism (Skinner, 1957), CA aimed to minimize errors by preventing them through teaching strategies.

Developed by Stephen Pit Corder and others in the 1960s and 1970s, EA systematically identifies, categorizes, and explains learner errors to understand the language learning process and L1 influence (Corder, 1967). For Saudi learners, EA helps pinpoint specific prepositional errors from negative transfer and how these vary by gender, providing targeted feedback (Corder, 1967). Ellis and Barkhuizen (2005) advocate EA for assessing errors, aiding both students and teachers in understanding error causes and implementing effective strategies to prevent language interference.

Gender Differences in Language Acquisition

Gender differences in language acquisition stem from biological, cognitive, and social factors, leading to distinct learning processes. Research, including studies by Labov (1966) and Trudgill (1972), indicates women often use more standard language forms, attributed to early socialization where girls are encouraged towards "polite" language and boys have more linguistic flexibility, including "rough talk" (Lakoff, 1975). This aligns with gender-specific social activities, such as boys' direct, confrontational speech in large groups versus girls' intimacy-fostering speech in small groups (Cameron et al., 1992).

In second language acquisition (SLA), female learners consistently outperform males (Burstall, 1975; Boyle, 1987). A large-scale study by Van et al. (2015) involving 27,119 adults Dutch L2 learners from 88 countries further supports females' superior language skills, suggesting their L1 linguistic advantage extends to L2 adulthood. Female learners also demonstrate stronger adaptability to L2 structures and fewer L1 transfer errors compared to males, influenced by cognitive and social factors like motivational differences and learning styles. These aspects are crucial for understanding gender differences in SLA, particularly concerning L1 interference, and have implications for tailoring teaching approaches.

Cognitive factors (memory, perception, problem-solving) and social influences (cultural expectations) significantly shape gendered language acquisition patterns. Bourafai (2021) emphasizes cognitive factors in language acquisition, noting their importance for managing thoughts and achieving clear language use. Naghi (2020) explored cognitive embodiment, gender, learning levels, and social factors in Vietnamese EFL learners' English preposition use, finding that both genders experienced L1 interference. While both exhibited intra-lingual interference, cognitive embodiment, social expectations,

and educational factors contributed to distinct approaches. Male learners focused on direct/spatial prepositions, whereas females showed broader usage, often affected by relational concepts, highlighting cognitive challenges specific to preposition learning.

Prior research on gender and language learning indicates males and females may exhibit distinct error types and responses to L1 interference in L2 contexts, particularly in prepositional use. Omari et al. (2023) analyzed gender-based error patterns in Algerian master's students' English preposition usage, finding L1 interference as the primary error source, with substitution, addition, and omission errors being most frequent. Despite minimal gender differences, the study underscored L1 interference's role, suggesting similar responses from male and female learners. Daquila (2021) examined Arabic-speaking EFL learners in the UAE, finding that females generally outperformed males, and those with musical intelligence training performed better. This suggests that while L1 interference affects both genders, educational background and cognitive abilities can moderate its influence, leading to varied learner outcomes.

English Preposition Acquisition

Prepositions are integral to English sentences, establishing relationships between words and clarifying meaning. Frank (1972) defines a preposition as "a word that connects a noun or pronoun to another word in a sentence," functioning as a connective element that relates nouns to other sentence components, such as subjects, verbs, objects, or complements. Common prepositions, including "at," "in," "on," and "near," provide contextual information about time (e.g., "at five o'clock," "in the morning"), place (e.g., "on the table," "near the window"), and manner (e.g., "with a knife," "without fear"). Additionally, prepositional phrases in English, which consist of a preposition followed by a noun or noun phrase (e.g., "into the house"), act as connectors within sentences, linking nouns or nominal groups to other parts of the sentence and enhancing sentence cohesion (Klammer, 2000). Mastering prepositions presents unique challenges for English learners due to their complex relational roles and varied forms, including single words (e.g., "from"), multi-word forms (e.g., "because of"), and compound expressions (e.g., "in contact with"). These complexities are further compounded for EFL learners whose native languages may lack direct equivalents for certain English prepositions, leading to frequent errors in usage. This is the reason behind different investigations to apply cognitive approaches to teach and learn English prepositions (Hung, et al., 2018).

Studies reveal that L1 interference significantly impacts learners' ability to correctly acquire and use English prepositions. For instance, Alwreikat and Yunus (2020) explored the common mistakes Jordanian EFL students make with prepositions, attributing many errors to interference from Arabic, which lacks direct counterparts for some English prepositions. The study advocates for tailored instructional strategies to address these challenges, including curriculum adjustments and teacher awareness programs that focus on prepositions through clear and systematic instruction. By illuminating the sources of these errors, the study provides insights to support more effective English language instruction for Jordanian students, focusing on improving both teacher approaches and student comprehension.

Similarly, Khalil (2022) employed Error Analysis (EA) to examine negative transfer from Arabic among Arabic-speaking students in Sweden, identifying that interference

was most pronounced in prepositional usage. The findings, based on an analysis of texts from students aged 13 to 15, showed that these learners often misapplied Arabic structures to English prepositional phrases, highlighting how L1 influence can complicate English preposition acquisition. Khalil's study underscores the importance of understanding these error patterns, suggesting that awareness of specific language structures in Arabic could improve educational outcomes for Arabic-speaking learners of English. Additionally, Hashim et al. (2024) found that L1 interference from Urdu impacts English preposition use among undergraduate students at Thal University, Bhakkar, Pakistan.

Challenges in Learning English Prepositions

Learning English prepositions presents distinctive challenges for Arabic-speaking EFL learners, often due to differences in syntactic and semantic structures between English and Arabic. Some EFL learners face issues in mastering prepositions regarding the impact of L1 interference on their language proficiency, particularly in writing. Studies show that Arabic speakers frequently struggle with English prepositions due to language transfer from Arabic, where certain prepositional concepts either do not exist or function differently. Alsariera (2024) and Al-Bawaleez and Abdullah (2023) both highlight the significant difficulties Arabic-speaking EFL learners face with English prepositions, particularly due to L1 interference. Alsariera's mixed-methods study found that a majority of Jordanian EFL students struggled with prepositions and coherence in writing, largely due to limited vocabulary and the influence of Arabic structures. Al-Bawaleez and Abdullah's quasi-experimental research on Jordanian university students similarly revealed that learners frequently guessed prepositions, resulting in low accuracy. Both studies emphasize the importance of targeted teaching strategies to address these challenges, and they recommend contrastive analysis to improve understanding of English prepositional structures.

Additionally, Al Jawad and Mansour (2021) both examined grammatical errors in the written English of Libyan EFL students, revealing that preposition errors ranked high among other grammatical mistakes, with 205 errors identified overall. The findings underscore the influence of L1 interference, noting that learners tend to transfer Arabic structures into English, which disrupts their accuracy in prepositional use. The authors suggest that targeted grammar instruction, specifically addressing the impact of L1 interference on prepositions, could significantly enhance writing proficiency.

Complexity and Variability of English Prepositions

The complexity of English prepositions provides significant difficulties for EFL learners. Prepositions in English can be classified as simple (e.g., "at," "on," "in") or complex (e.g., "instead of," "on behalf of," "because of"). Unlike simple prepositions, which occasionally have equivalents in Arabic, complex prepositions are more challenging as they often lack direct translations. This difference is compounded by the fact that prepositions in English can carry multiple meanings depending on context, further increasing their difficulty. Zaabalawi's (2021) study specifically tackled this complexity by examining the impact of explicit prepositional instruction within translation exercises for Arab EFL learners. In a study with 60 Kuwaiti university students, Zaabalawi (2021) divided the participants into two groups: one received direct

prepositional instruction as part of their translation coursework, while the control group focused solely on translation skills. The experimental group, which received preposition-specific training, showed marked improvements in using prepositions accurately in English, underscoring the benefits of targeted instruction.

On the other hand, Ait Aissa and Chami (2023) explored how negative transfer from Arabic syntactic structures exacerbates the challenges of English preposition usage, with particular focus on Algerian EFL students' reliance on Arabic syntax in their English writing. Through the Diagnostic Assessment Hypothesis (DAH) and Error Analysis (EA), they identified that the variability in English prepositional structures, contrasted with Arabic's distinct syntactic norms, led to persistent errors. This variability, combined with students' tendency to apply Arabic grammatical logic, contributed to common prepositional errors and resulted in non-native-like usage in English.

Common Errors and Difficulties Faced by EFL Learners

English prepositions pose significant challenges for EFL learners, especially for those whose native language differs substantially in prepositional structure, such as Arabic. A frequent source of error stems from negative transfer, where learners apply rules or patterns from their L1, often leading to syntactic errors. For Arabic-speaking students, this interference is intensified due to the lack of direct equivalence in prepositional usage between English and Arabic. As Scott and Tucker (1974) observed, "prepositions seldom have a one-to-one correspondence between English and Arabic," meaning that one Arabic preposition may translate into multiple English prepositions and vice versa. This linguistic discrepancy contributes to confusion and error among learners who struggle to align Arabic prepositions with their English counterparts.

Djellab et al. (2021) and Sanjaya and Bram (2021) both investigated the impact of native language interference on EFL learners' accuracy with English prepositions, albeit in different contexts. They focused on syntactic errors among Algerian EFL students, finding that negative transfer from Arabic led to frequent misapplications of English prepositions. Similarly, Sanjaya and Bram (2021) examined prepositional usage in thesis acknowledgments among Indonesian EFL students, identifying common issues such as unnecessary insertion and omission of prepositions. Both studies underscore the pervasive influence of native language structures on English preposition usage, emphasizing the need for targeted, context-specific teaching approaches to help learners navigate the differences between their L1 and English.

Alnajar and Hadwanm (2023) expanded on these findings by examining common grammatical errors among Yemeni undergraduate EFL students. Utilizing Dulay, Burt, and Krashen's (1982) taxonomy, they found that preposition-related errors were the most frequent (11%), primarily due to negative transfer from Arabic. They noted that learners often incorrectly applied Arabic prepositional structures to English, resulting in frequent misselection and omission errors.

Role of L1 Interference in Preposition Acquisition

The role of first language (L1) interference in acquiring English prepositions has been widely documented, with strong evidence showing that L1 interference significantly

impacts learners' ability to produce accurate second language (L2) linguistic forms. The influence of L1 on L2 preposition acquisition is driven by both similarities and differences in linguistic structures between the two languages. When similarities exist, positive transfer occurs, aiding acquisition; however, structural differences often lead to negative transfer, resulting in errors (Odlin, 1989; Lee, 1999). Sinha et al. (2009) further emphasize that L1 interference universally affects all aspects of language acquisition, including phonology, morphology, syntax, and semantics.

Altakhaineh and Ibrahim's (2020) study at Al Ain University in the UAE illustrates how incidental exposure to English prepositions through reading exercises can support preposition acquisition among Arabic-speaking learners. Their research divided participants into treatment and control groups, with the treatment group engaging in reading comprehension tasks that indirectly exposed them to prepositions such as "in," "on," and "at." The findings revealed that learners in the treatment group showed significant improvement in their receptive knowledge of prepositions, especially in multiple-choice tests. However, the study also found that incidental learning alone was insufficient for productive accuracy in preposition use, suggesting that while exposure to prepositions can support comprehension, direct instruction may be necessary to achieve full mastery.

Islam (2020) also underscores the pervasive impact of L1 interference in second language acquisition, particularly on syntactic and lexical accuracy. By examining a wide array of inter-lingual errors, Islam (2020) identifies that negative transfer from L1 structures commonly leads to prepositional errors in English, including omissions, substitutions, and incorrect usages, as learners often unconsciously apply their L1 syntactic rules. This study suggests that such L1-driven errors are particularly resistant to correction when learners rely solely on communicative teaching methods. Instead, it advocates for a balanced teaching approach that combines form-focused grammar instruction with communicative activities.

Specific Interference from Arabic to English

English preposition acquisition poses a distinct challenge for Arabic-speaking learners due to fundamental structural differences between the two languages. English prepositions often do not have direct equivalents in Arabic, leading learners to rely on literal translation, which results in language transfer errors. As prepositions convey various spatial, temporal, and relational meanings in English, their proper usage requires an understanding of nuanced distinctions that are not readily mapped onto Arabic's more flexible and less varied prepositional system.

Alhammad's (2023) study sheds light on how Saudi EFL students navigate the English prepositions "in," "on," and "at," employing the Markedness Theory framework to illustrate learning difficulties. According to the theory, marked, or less frequent, structures are more challenging for learners, particularly when no direct L1 equivalent exists. She found that "in," the unmarked preposition, was acquired relatively easily due to its Arabic counterpart "fi," which has a broader, more flexible use. However, students struggled with "on" and "at" because "ʕala" (the Arabic equivalent of "on") covers only limited semantic ground compared to its English counterpart, and Arabic lacks an equivalent for "at." These findings underscore the role of L1 interference in

prepositional misuse, as students tend to fall back on Arabic structure, especially when semantic alignment is absent.

Similarly, Kamil and Hazem (2020) investigated the influence of Arabic on English prepositional use among second-year Arab students and found that structural discrepancies between Arabic and English prepositions often resulted in incorrect applications. Their research highlighted that students frequently misused prepositions like "in," "on," and "at" due to the direct transfer of Arabic prepositions into English contexts, leading to various errors. Common mistakes included replacement of prepositions, such as using "in" in place of "on," omissions, and even repetitions. They noted that students' limited knowledge of English prepositions and their tendency to depend on a restricted set of terms further complicated their acquisition. The study also observed that Arabic-speaking learners struggled particularly with prepositions indicating spatial relationships, as Arabic employs a smaller and more contextually adaptable set of prepositions.

Due to fundamental differences between Arabic and English, particularly in areas like syntax, vocabulary, and prepositional use, Arabic-speaking learners often encounter significant challenges. These challenges can lead to persistent errors and hinder their ability to achieve fluency in English. Several recent studies have examined these issues in depth, providing valuable insights into the impact of L1 interference and potential strategies for addressing it. Both Almegren (2021) and Aboshair (2024) underscore the pervasive impact of L1 interference on language acquisition, illustrating that this interference extends beyond isolated vocabulary or grammatical structures to affect multiple areas of language use. Almegren's (2021) study examined Arabic-speaking learners' use of English prepositions, a domain particularly susceptible to L1 transfer due to syntactic and contextual differences between Arabic and English. Through preposition placement tests and learner interviews, Almegren observed that students often transferred Arabic prepositional patterns into English, resulting in inappropriate or incorrect usage, especially in contexts with significant syntactic divergence.

In contrast, Aboshair (2024) explored the broader challenges faced by Syrian students in learning English, identifying negative transfer from Arabic as a major barrier. Aboshair found that students frequently relied on direct translations from Arabic, leading to persistent grammatical and prepositional errors and distorted sentence structures. Additionally, fossilization was a notable issue, with recurring mistakes observed across grade levels, suggesting a plateau in students' language development. These challenges were further exacerbated by inconsistencies in instructional quality, such as the presence of unqualified or frequently absent teachers, as well as a reliance on literal translation methods, which prevented students from developing a deeper, more intuitive understanding of English syntax and usage. Together, these studies highlight the need for targeted pedagogical strategies to address L1 interference early in the language-learning process for Arabic-speaking EFL learners.

Gender and L1 Interference in Saudi EFL Context

In the Saudi EFL learning environment, gender dynamics, combined with L1 interference, pose significant challenges for learners, especially in mastering English prepositions. Social, cultural, and educational factors within Saudi society often

contribute to varying learning experiences and performance between male and female learners. These differences, coupled with the influence of the native Arabic language, make English preposition acquisition particularly challenging, as highlighted by several recent studies. Given the unique linguistic and sociocultural context of Saudi Arabia, examining Saudi EFL learners as a research sample is essential to understanding how gender and L1 interference interact in shaping language outcomes. Preliminary classroom observations and informal interviews with instructors revealed recurring patterns of prepositional errors and gender-based variation, which further justified the need for a focused investigation.

For instance, Abker (2021) investigated prepositional challenges faced by Saudi university students and found that students commonly struggled with identifying and using correct prepositions, especially after certain verbs. Using a descriptive statistical approach with written exams, the study emphasized the need for tailored interventions to strengthen prepositional command, which is often hindered by L1 interference. Almuhaysh (2022) expanded on these insights, examining the broader effects of L1 transfer across varying proficiency levels. Through a large-scale study involving 531 Saudi EFL students, Almuhaysh found that learners with higher proficiency demonstrated less reliance on Arabic transfer, suggesting that as language competence grows, reliance on L1 decreases. This supports the idea that proficiency can mitigate some effects of L1 interference, particularly in prepositional accuracy, yet also highlights that the syntactic differences between Arabic and English prepositional systems remain a persistent obstacle, especially for learners with limited exposure to advanced English structures.

Further emphasizing the complexity of L1 interference, Alotaibi (2023) analyzed the writing of Saudi female students and identified prepositions as a primary area of difficulty. The study, which examined grammatical errors in English essays, revealed that prepositional misuse was one of the most frequent errors attributed to direct negative transfer from Arabic. Like previous studies, Alotaibi's findings underscore the need for a nuanced approach to teaching prepositions, suggesting that instruction should focus on understanding linguistic distinctions between Arabic and English to reduce interference.

Research gap

This research addresses a gap in understanding the specific impact of gender on L1 interference in English preposition learning among Saudi EFL students. While previous studies by Alkhudiry (2020) and Almegren (2021) have explored general L1 interference effects, and Nghi (2023) hinted at gender-specific processes, there is a limited, comprehensive investigation into how gender influences the manifestation and severity of L1 transfer errors in this context. The study highlights that despite extensive research on L1 transfer, the specific negative transfer of Arabic to English prepositions by Saudi EFL learners requires further exploration due to significant syntactic differences (Alotaibi, 2023; Khalil, 2022; Almuhaysh, 2022). By examining the nuanced interaction between gender and L1 negative transfer, this study aims to provide a more comprehensive insight into the challenges faced by both male and female learners, identify frequent errors and their transfer degree, and ultimately inform

gender-responsive instructional strategies and contribute to second language acquisition theory and pedagogy for Saudi EFL learners.

METHOD

Research Questions

This study examines how L1 interference and gender impact the acquisition of English prepositions among EFL Saudi learners. This research study aims to answer the following questions:

1- To what extent does L1 impact errors in the use of prepositional phrases?
2- How does gender influence the occurrence and nature of L1 negative transfer in the acquisition of English prepositions among Saudi EFL learners?

Research Design

A mixed-methods approach will be employed to gain a comprehensive understanding of the target phenomenon. Dörnyei (2007) asserts that this approach provides a more holistic understanding, while Creswell and Creswell (2017) emphasize that combining quantitative and qualitative data allows researchers to develop a deeper insight into the research problem by comparing the two datasets. The decision to use a mixed-methods approach in this study arises from the need to thoroughly understand how negative transfer and gender influence the acquisition of English prepositions among Saudi EFL learners. By integrating quantitative tests with qualitative interviews, this research aims to corroborate findings, enhance the validity of the data through triangulation, and attain the learners' perspectives on the complex dynamics of language learning processes across genders and the experiences of individual learners.

The Participants

This study involved 40 participants (20 males and 20 females) selected randomly from the English department majors at Majmaah University, all in their second year and aged between 20 and 22. These participants were at the academic level, shared linguistic background, and similar exposure to English instruction. Second-year students were specifically chosen because they have received sufficient foundational training in English, including grammatical structures such as prepositions, yet are still in the process of mastering these elements. This makes them particularly relevant to a study on the acquisition of English prepositions, especially about L1 interference. Their homogeneity in terms of academic stage helps control for variability in English proficiency and educational experience, thereby strengthening the internal validity of the research. Additionally, selecting participants from both genders allowed for a more balanced and nuanced analysis of gender-based differences in error patterns, which is central to the study's objectives. Ethical considerations were a priority throughout the research process. Ethical considerations were strictly adhered to during the data collection process. All participants were given informed consent, ensuring they were fully aware of the study's purpose and their rights. Data confidentiality and participant anonymity were always maintained. Additionally, the study complied with the ethical guidelines set forth by the Deanship of Higher Education at Majmaah University.

Data Collection

The data collection process for this study was meticulously designed to ensure the reliability and validity of the findings. Given the mixed-methods approach, both

quantitative and qualitative data were gathered to provide a comprehensive understanding of the influence of L1 interference and gender on the acquisition of English prepositions among Saudi EFL learners. Quantitative data were collected through a standardized test to identify L1 impact on errors in the use of prepositional phrases among the participants. The test was administered to all 40 participants. The results were statistically analyzed to identify errors related to L1 interference and gender differences. Qualitative data were obtained through structured interviews. The interviews were conducted online with each participant to gain insights into their experiences and perceptions regarding English preposition acquisition. These interviews were audio-recorded and transcribed for detailed analysis. For the enhancement of the validity of the research, triangulation was employed by comparing and cross-verifying the quantitative and qualitative data. This method helped to corroborate the findings and provide a more nuanced understanding of the research problem. After these data collection methods were employed, comprehensive data were gathered to contribute to a deeper understanding of the factors influencing English preposition acquisition among Saudi EFL learners.

This study utilized a two-part test adapted from multiple validated sources, with several items modified for clarity and to align with the participants' proficiency levels and the study's objectives. The test was primarily based on the study by Almuhaysh (2022), which is discussed in the literature review; five items were adopted from this study, with one item modified to simplify sentence structure. Six items were drawn from the study by Zaabalawi (2021), also cited in the literature review, and all were applied without changes. Seven items were taken from *Essential English Grammar* (Murphy, 2007), three of which were modified to provide additional context or improve clarity. Four items were adapted from *Module 6 – Communicative Grammar Book* (Murphy, 2012), with two modified, one for cultural sensitivity and the other to add contextual detail. These sources are all part of the students' coursework, ensuring relevance and familiarity. The first part of the test consisted of nine multiple-choice questions that assessed recognition of correct prepositional use and were evenly divided across three categories: place (3), time (3), and direction (3). Moreover, the second part included twelve short-answer questions that required students to supply prepositions in context, also evenly balanced across four categories: time (3), place (3), direction (3), and phrasal verbs (3). For a detailed breakdown of the sources and modifications of each item.

To explore learners' experiences and perspectives on learning prepositions across genders, qualitative data were collected through structured interviews. This method aimed to deepen understanding of how individual learners perceived and navigated English preposition acquisition. The interview format includes five clear and direct questions, carefully designed to avoid confusion for the participants. Each interview lasted between 5 to 10 minutes and was conducted online in a calm and comfortable setting. 12 participants (six females and six males) were selected from those who took the test to ensure fair and balanced representation. All participants were from Majmaah University. The objective of the interviews was to gain deeper insight into whether gender differences existed in learning English prepositions and to better understand the learners' individual experiences.

Data Analysis

For the English Preposition Test, the study's tests were analyzed using the Statistics Package for Social Sciences (SPSS) to calculate the mean, median, mode, standard deviation, and range for the scores of both male and female participants. This gives an overview of the central tendency and variability in the research data. By using inferential statistics, such as an Independent Samples t-test, we can determine if there are significant differences in preposition usage errors between male and female participants. Afterwards, the chi-squared test is used to examine the relationship between gender and prepositional error types. For the Structured Interviews, a Thematic Analysis was used through open Coding by transcribing the interviews and then coding the data, and Axial Coding by grouping the initial codes into broader categories to identify relationships between themes.

FINDINGS

To answer the first question, To what extent does L1 impact errors in the use of prepositional phrases?, the first section of the test was designed to consist of 9 multiple-choice items designed to identify common errors in preposition usage influenced by negative transfer from Arabic (L1), with each item offering four options and only one correct answer. Participants' responses were entered manually into Microsoft Excel, where each answer was classified as correct, an error related to L1 interference, or an error unrelated to L1. This classification allowed for the calculation of frequencies and percentages for each response type. These questions were designed to investigate common prepositional errors and determine how often such errors could be attributed to negative transfer from Arabic. As indicated in Table 1, L1-related errors were particularly high in Questions 1, 2, 3, 4, 5, 8, and 9, where a large portion of participants selected incorrect answers consistent with common patterns of negative transfer. In contrast, Questions 6 and 7 showed a higher rate of correct responses, suggesting that these items were less affected by L1 interference.

Table 1
Findings of responses to multiple-choice questions (n = 40)

No	Questions	Correct (F)	Correct (%)	L1 (F)	L1 (%)	Other (F)	Other (%)	Total (F)	Total (%)
Q1	We agreed to meet ____ Monday, the 3rd of this month.	19	48%	19	48%	2	5%	40	100%
Q2	You will find the requested document attached ____ your email.	10	25%	19	48%	11	28%	40	100%
Q3	Mohammed was ____ the bus when I called him.	11	28%	27	68%	2	5%	40	100%
Q4	He decided to go ____ his dream of becoming a doctor.	14	35%	23	58%	3	8%	40	100%
Q5	My friend is studying ____ the University of Washington.	16	40%	17	43%	7	18%	40	100%
Q6	The moon travels ____ the Earth in a circular path.	27	68%	4	10%	9	23%	40	100%
Q7	The park is beautiful ___ spring.	20	50%	6	15%	14	35%	40	100%
Q8	I fell asleep ___ the film because I was very tired after a long day.	22	55%	12	30%	6	15%	40	100%
Q9	My house is ___ the end of the street on the left.	8	20%	17	43%	15	38%	40	100%

To support the classification of these L1-related errors, the current study relies on Abu-Chacra's (2017) explanation of Arabic prepositions and their English equivalents, which was also applied in Almuhaysh's (2022) investigation of L1 interference among Saudi EFL learners. Abu-Chacra (2017) explained the primary prepositions with their English equivalents as follows: من (min) means *from, of, than*, في (fī) means *in, at*, and على ('alā) translates as *on, over, at*. These examples illustrate how broad and

overlapping Arabic prepositions can be confusing when learners attempt to use them on English structures (see Figure 1).

مِنْ min from, of, than	إِلَى ʾilā to, until	عَنْ ʿan from, about	عَلَى ʿalā on, over, at	فِي fī in, at	مَع maʿa with	أَمَامَ ʾamāma in front of	بَعْدَ baʿda after	بَيْنَ bayna between, among	تَحْتَ taḥta under	فَوْقَ fawqa above, over
						حَوْلَ ḥawla around, about	دُونَ dūna without, under	بِدُونِ bi-dūni without	ضِدَّ ḍidda against	عِنْدَ ʿinda by, with
حَتَّى hattā until, till, to, up to	مُنْذُ munḏu since, ago, from	لِ... (لَ...) li... (la...) for, to, because of	بِ... bi... by, with, in	كَ... ka... as, like		قَبْلَ qabla before	قُدَّامَ quddāma before, in front of	لَدَى ladā with, at, by	نَحْوَ nahwa towards, approximately	وَرَاءَ warāʾa behind

Figure 1
Prepositions with their English equivalents (Abu-Chacra, 2017).

There are 35% of participants who chose "in" and 12.5% chose "at" in place of the correct preposition "on", as shown in Figure 1, reflecting negative transfer. In Arabic, the preposition "في" (fi) is often used to express general and specific time references, including days, which can lead learners to misuse "in" in English. Abu-Chacra (2017) explains that "fi" overlaps with both "in" and "at," contributing to such confusion. Alhammad (2023) also noted that learners often default to "in" due to its broad Arabic equivalent, while "on" and "at" lack clear counterparts. Additionally, one of the female participants who has been interviewed struggled with this preposition usage, *"it's hard to distinguish their uses in sentences, like "in" and "at".* Similarly, a male participant explained that choosing between them is difficult, *"especially when they're used for different things like direction or time".*

Table 2
Findings of responses to multiple-choice questions (n = 40)

No	Questions	Prepositions												
		in	on	to	at	into	for	after	behind	of	about	around	over	during
Q1	We agreed to meet ___ Monday, the 3rd of this month.	35%	*47%	5%	13%									
Q2	You will find the requested document attached ___ your email.		40%	*7%	25%	28%								
Q3	Mohammed was ___ the bus when I called him.	42%	*28%		25%		5%							
Q4	He decided to go ___ his dream of becoming a doctor.		8%				17%	*35%	40%					
Q5	My friend is studying ___ the University of Washington.	*42%	5%		40%					13%		10%		
Q6	The moon travels _____ the Earth in a circular path.		8%								10%	*67%		
Q7	The park is beautiful ___ spring.	*50%	12%		15%									23%
Q8	I fell asleep ___ the film because I was very tired after a long day.	20%	15%		10%									*55%
Q9	My house is ___ the end of the street on the left.	40%	17%	*23%								20%		

*The correct answer

In the second item of the test, most learners incorrectly chose the prepositions "on" and "at" instead of the correct answer "to", reflecting interference from Arabic, where the preposition "على" (ʿalā) frequently occurs in similar contexts, which results in students overgeneralizing. A few interview responses demonstrate these findings; for example, a

participant admitted that she sometimes gets confused between the meaning of the words "on" and "at", which leads learners to rely on familiar L1 patterns, reducing their ability to use English prepositions correctly.

Furthermore, a high number of participants incorrectly chose "in" (42%) and "at" (25%) instead of the correct preposition "on," reflecting strong L1 influence. In Arabic, the preposition "في" (fi) is often used to describe being inside a place or object, leading learners to transfer this usage when describing being on public transportation. This mirrors the pattern observed in Almuhaysh (2022), where 52.6% of participants selected "in" for a similar sentence.

Moving to the fourth item, it was found that many participants selected the incorrect preposition "behind" (40%) and "for" (17%) rather than the correct preposition "after", suggesting errors influenced by Arabic sentence structure. The selection of "behind" may stem from the Arabic word "waraʾ" (وراء), which conveys the idea of following something, leading to semantic interference. Likewise, the choice of "for" could be due to the influence of the Arabic preposition "li" (لـ), often used to indicate purpose or goal (e.g., "ليحقق حلمه") to achieve his dream. As noted in Abu-Chacra's (2017) preposition equivalents. On the other hand, "li" commonly translates to "for" or "to," which may have caused learners to mistakenly transfer this usage into English.

There was a clear indication of L1 interference in the fifth item, where 42% of participants selected the incorrect preposition "in" instead of the correct "at." This error likely stems from the Arabic preposition "في" (fi), which commonly corresponds to "in" and is broadly used to indicate place, including institutions, unlike English, which more precisely uses "at" in such academic contexts. According to Abu-Chacra's (2017) list of equivalents, "fi" can be confused with "in" and "at." This finding is supported by Kamil and Hazem (2020), who found that Arab students often misused prepositions such as "in" and "at" due to structural differences between Arabic and English.

In contrast, only 10% of participants selected the incorrect preposition "about," while the majority (67%) correctly chose "around," followed by "over" (15%) and "on" (8%). The error with "about" appears to stem from negative L1 transfer, as the Arabic preposition "حول" (ḥawla) corresponds to both "about" and "around" in English (Abu-Chacra, 2017). This similar meaning can confuse learners, leading some to choose "about" in contexts where "around" is more appropriate. However, the high accuracy in selecting "around" may be due to fewer similar prepositions in Arabic when referring to direction. This allows learners to make a clearer connection in this spatial context. For example, "The earth rotates around its axis once", "تدور الأرض حول محورها" (Abu-Chacra, 2017).

Although half of the participants (50%) selected the correct preposition "in," 15% chose "at," indicating confusion likely caused by negative transfer. The preposition "في" (fi) is broadly used to express time in Arabic, which may lead learners to incorrectly apply it to contexts that require "in" in English. This generalization blurs the distinction between time-specific prepositions. As one female participant explained, *"I didn't face many challenges, but when sentences included months and days, I used to get confused,"* illustrating how L1 habits continue to influence learners' use of time-related prepositions.

Moreover, many participants (55%) successfully chose "during" in item 8, but 20% selected "in" and 10% chose "at," which are errors possibly influenced by L1 interference. In Arabic, the sentence can be translated into prepositions "في" such as " في منتصف" (in the middle of) or "أَثناء" (during) that are often generalized in learners' minds, especially as "في" (fi) is commonly used in a wide range of temporal and spatial contexts.

In the final item of part one, 40% of participants selected "in" instead of the correct preposition "at," revealing a common L1-based error. Arabic learners often transfer the preposition "في" (fi), which is broadly used in spatial expressions and can correspond to "in," "on," or "at" in English (Abu-Chacra, 2017). This similarity can be confusing in selecting the most contextually accurate option. P6 stated in her interview, *"For me, using prepositions in a sentence is hard, especially place prepositions"*, underlining that spatial expressions are particularly difficult due to uncertainty in usage.

To further investigate common prepositional errors, the second part of the test consisted of 12 short-answer questions requiring participants to provide the correct preposition in context. These items included examples of time, place, and direction prepositions, with the last three questions focusing on phrasal verbs. Participant responses were manually coded in Excel and categorized into three types: correct, error due to L1 interference, and other errors. As shown in Table 3, several questions had high frequencies of L1-related errors, particularly Items 2, 3, 4, 8, 9, 10, and 12, which illustrate a continued transfer from Arabic is also important to note that some students left blank responses, resulting in missing data across all items. Therefore, incomplete data slightly affects the total analysis yet offers insight into the most problematic areas of preposition usage among learners.

Table 3

Findings of Responses to Short Answer Questions.

No	Questions	Error due to L1	Other error	Correct
Q1	The criminal escaped _____ prison	5	30	5
		12.50%	75.00%	12.50%
Q2	Have you decided _____ a date for your wedding yet	11	25	4
		27.50%	62.50%	10.00%
Q3	Jason was late because he wasn't aware ___ the time	7	28	5
		17.50%	70.00%	12.50%
Q4	I arrived _____ the country two weeks ago.	8	26	6
		20.00%	65.00%	15.00%
Q5	Tim wore sunglasses to protect his eyes _____ the sun.	4	30	6
		10.00%	75.00%	15.00%
Q6	Do you want to go ___ the cinema this evening?	3	26	11
		7.50%	65.00%	27.50%
Q7	Sue and Dave have been married _____ 1968.	3	26	11
		7.50%	65.00%	27.50%
Q8	We arrived _____ the airport ten minutes late.	8	22	10
		20.00%	55.00%	25.00%
Q9	My friend stayed _____ a hotel near the beach.	12	20	8
		30.00%	50.00%	20.00%
Q10	My grandfather looked _____ me when my parents went on a holiday.	12	25	3
		30.00%	62.50%	7.50%
Q11	My friends did not turn ___ for my party because they had exams.	5	31	4
		12.50%	77.50%	10.00%
Q12	As it was raining, when I reached my friend's house, I went ___ through the back door.	12	27	1
		30.00%	67.50%	2.50%

As shown in Table 3, 12.5% of the participants committed errors in this item due to L1 interference, particularly selecting incorrect prepositions influenced by Arabic. In Arabic, the preposition "من" (min) is often used to express movement away from a place, which may lead learners to substitute it directly in English contexts like "escaped from prison." However, in standard English, the preposition is typically omitted in this expression. Abu-Chacra (2017) lists "من" as equivalent to "for," which reinforces this type of transfer error. This tendency is also explained by Swan and Smith (2010), who explained that Arab learners frequently produce prepositional errors by translating directly from Arabic, resulting in incorrect forms such as "afraid from" or "responsible from" instead of afraid of, responsible for.

Moving to the second item, 27.5% of learners committed L1-related errors by using prepositions such as "at" or "over," which can be traced to interference from the Arabic preposition "على" (ʿalā). According to Abu-Chacra (2017), this preposition often aligns with "on" in English, but such similarities can be misleading in certain constructions. Additionally, 17.5% of participants selected incorrect responses, such as "about" and "in", regarding the third item. These errors stem from translating the preposition in the sentence into Arabic, where learners may interpret it as "عن الوقت" or "بالوقت". The preposition "عن" (ʿan) is equivalent to the English preposition "about," and "بـ" (bi) is often understood as "in". According to Alwreikat and Yunus (2020), the first challenge for these learners is that not every Arabic preposition has a fixed English equivalent and vice versa, and also, there is no fixed usage and meaning for every preposition demonstrating time in both English and Arabic.

For the fourth item, it revealed that 20% of participants incorrectly selected "to," a response influenced by L1 interference. The preposition "إلى" (ilā), meaning "to," is commonly used in contexts referring to arriving at a destination, which may have led learners to transfer this structure into English. Correspondingly, in Item 5, 10% of participants selected "of," an error also attributed to negative L1 transfer. Arabic learners may misinterpret the sentence as "لحماية عينيه **من** الشمس," and the English equivalent "من" (min) as "of" in English, as shown in Figure 1.

 7.5% of participants incorrectly selected the preposition "for" instead of the correct "to" answering the sixth item. This mistake likely results from a direct translation from Arabic, where learners interpret the phrase "للسينما" as "to the cinema" and mistakenly associate the Arabic preposition "لـ" with "for" instead of "to". Another L1 is found in the participants' answers for item seven. 7.5% of the learners chose "from" instead of "since." This error can also be attributed to L1 interference. The Arabic preposition "منذ" is translated as both "since" and "from" in English. These semantic similarities and differences can cause interference, as reflected by P2: *"I often confuse English prepositions because many seem similar. When I use them in sentences, they all sound correct, making it hard to determine which one is right".* Additionally, another L1 error was identified in Items 8 and 9, which involved incorrect prepositional choices influenced by Arabic equivalents. In item 8, 20% of participants selected "to" instead of the correct preposition "at," likely due to translating the Arabic structure " وصلنا إلى المطار," where "إلى" is often misinterpreted as "to" in English. Similarly, in Item 9, 30% of participants chose "in" instead of "at," reflecting negative transfer from the Arabic preposition "في," which learners commonly equate with "in."

The last three items focus on phrasal verbs, which are 10, 11, and 12. Participants displayed L1-related errors when dealing with phrasal verbs, which are notably absent in Arabic, making them particularly challenging for EFL learners. In Item 10, some learners chose "at" instead of the correct particle "after" in "looked after," reflecting a literal interpretation influenced by Arabic, where such compound verb forms do not exist. Similarly, in Items 11 and 12, "to" was incorrectly selected instead of "up" ("turn up") and "in" ("went in"), respectively, suggesting confusion due to the learners' tendency to rely on direct translation strategies from Arabic. These difficulties stem from structural differences between the two languages and limited exposure to phrasal verbs in most EFL classrooms. These errors align with interview data; for example, P6 stated, *"Yes, I find phrasal verbs hard because we don't use them much in everyday conversation… It's also hard to remember which preposition to use in specific situations."*. According to Achou (2020), phrasal verbs are rarely present in Arabic but are central to English expression, adding nuance and naturalness to communication. Their absence in Arabic not only leads to comprehension and usage errors but also causes learners to avoid or misuse them. Achou (2020) further notes that increased L2 proficiency may reduce bilinguals' reliance on L1, suggesting that these errors may decline with greater language exposure and practice.

To answer the second question, How does gender influence the occurrence and nature of L1 negative transfer in the acquisition of English prepositions among Saudi EFL learners?, The chi-square tests presented in Table 4 were conducted to examine the relationship between gender (female vs. male) and error type (L1 interference) across the nine multiple-choice questions in Part One of the test. The Pearson χ^2 values and their associated significance levels (p-values) indicate whether there are statistically significant differences in error types based on gender. The analysis revealed that none of the items showed statistically significant gender differences, as all p-values were greater than .05. The significance values ranged from .070 to 1.000. This indicates that there is no significant association between gender and the probability of committing L1-related errors versus other errors on any individual item in the multiple-choice section.

Table 4

Chi-square tests for gender vs error type for part one

No	Question	Gender	Error due to L1	Other error	χ^2	Sig.
Q1	We agreed to meet ___ Monday, the 3rd of this month.	Female	6	9	4.394	.070
		Male	13	4		
Q2	You will find the requested document attached ___ your email.	Female	9	8	.308	.728
		Male	10	6		
Q3	Mohammed was ___ the bus when I called him.	Female	12	7	1.152	.476
		Male	15	4		
Q4	He decided to go ___ his dream of becoming a doctor.	Female	10	6	.135	.736
		Male	13	6		
Q5	My friend is studying ___ the University of Washington.	Female	6	10	1.889	.303
		Male	11	7		
Q6	The moon travels ___ the Earth in a circular path.	Female	2	10	.208	.000
		Male	2	6		
Q7	The park is beautiful ___ spring.	Female	3	8	.189	.000
		Male	3	12		
Q8	I fell asleep ___ the film because I was very tired after a long day.	Female	7	7	1.094	.457
		Male	5	11		
Q9	My house is ___ the end of the street on the left.	Female	8	9	.000	.000
		Male	9	8		

However, for the second item, a statistically significant gender difference was observed in the selection of prepositions, $\chi^2(3) = 11.188$, p = .011 (see Table 5). While the overall sample showed no significant gender-related patterns in most questions, this item stands out.

In detail, female participants were much more likely to select the correct preposition "to" (90%), whereas male participants overwhelmingly selected the incorrect preposition "into" (81.8%). The preposition "on" was chosen equally by both genders (50%), and although fewer selected "at," males accounted for the majority (66.7%).

Table 5
Chi-square Tests for Chi-square Test* for "You will find the requested document attached _____ your email."

Gender		You will find the requested document attached			_____ your email.	Total
		at	into	on	*to	
Female	n.	1	2	8	9	20
	%	33.3%	18.2%	50.0%	90.0%	50.0%
Male	n.	2	9	8	1	20
	%	66.7%	81.8%	50.0%	10.0%	50.0%
Total	n.	3	11	16	10	40
	%	100.0%	100.0%	100.0%	100.0%	100.0%

*. Pearson $\chi^2 = 11.188$, p = .011. *Correct answer

Additionally, a statistically significant gender difference in prepositional choice was found in item 9, $\chi^2(3) = 8.730$, p = .033 (see Table 6). Female participants were far more likely to select the correct preposition "at" (88.9%), whereas male participants more often chose incorrect options such as "on" (71.4%) and "over" (75%). The preposition "in," also incorrect, was selected equally by both groups (50%). This result matches the earlier finding for the second item, where males and females also differed significantly in their preposition selection. Interestingly, interview responses support this pattern: while many male learners acknowledged relying on Arabic when selecting prepositions, some female learners reported actively avoiding cross-linguistic connections, indicating a higher degree of metalinguistic awareness and strategic separation between L1 and L2 usage.

Table 6
Chi-square Tests for Chi-square Test* for "My house is _____ the end of the street on the left."

Gender		My house is	_____ the end of the street on the left.			Total
		*at	in	on	over	
Female	n.	8	8	2	2	20
	%	88.9%	50.0%	28.6%	25.0%	50.0%
Male	n.	1	8	5	6	20
	%	11.1%	50.0%	71.4%	75.0%	50.0%
Total	n.	9	16	7	8	40
	%	100.0%	100.0%	100.0%	100.0%	100.0%

Pearson $\chi^2 = 8.730$, p = .033. *Correct answer

The chi-square tests assess whether there is a statistically significant relationship between gender (female vs. male) and the type of error made (Error due to L1 vs. Other error) across the 12 short-answer items in part two of the test, as presented in Table 7.

After looking at the significance values (Sig.), none of the items had a p-value lower than the usual cutoff of .05, which means there were no meaningful gender differences in the types of L1-based versus other errors across all items. The p-values range from .204 to 1.000, with most items showing minimal variation in error type between male and female learners. Therefore, these results suggest that gender does not significantly influence the tendency to make L1-related errors or other types of errors in short-answer contexts. Both male and female Saudi EFL learners appear equally susceptible to L1 interference and other error types when required to produce prepositions without prompts.

Table 7

Chi-square tests for gender vs error type for part two

No Question		Gender	Error due to L1	Other error	Pearson χ^2	Sig.
Q1	The criminal escaped _____ prison.	Female	3	11	.530	.636
		Male	2	15		
Q2	Have you decided ___ a date for your wedding yet?	Female	6	9	.396	.712
		Male	5	12		
Q3	Jason was late because he wasn't aware ___ the time.	Female	5	9	2.249	.204
		Male	2	14		
Q4	I arrived _____ the country two weeks ago.	Female	4	9	.019	.000
		Male	4	9		
Q5	Tim wore sunglasses to protect his eyes ___ the sun.	Female	3	10	1.532	.311
		Male	1	14		
Q6	Do you want to go ___ the cinema this evening?	Female	2	13	.169	.000
		Male	1	11		
Q7	Sue and Dave have been married _____ 1968.	Female	2	10	.130	.000
		Male	1	8		
Q8	We arrived ___ the airport ten minutes late.	Female	3	8	.336	.679
		Male	5	8		
Q9	My friend stayed ___ a hotel near the beach.	Female	4	7	.735	.453
		Male	8	7		
Q10	My grandfather looked _____ me when my parents went on a holiday.	Female	5	8	.001	.000
		Male	7	11		
Q11	My friends did not turn ___ for my party because they had exams.	Female	3	10	.451	.639
		Male	2	13		
Q12	As it was raining, when I reached my friend's house, I went ___ through the back door.	Female	6	6	.037	.000
		Male	6	7		

Finally, the results of the independent-samples t-test in Table 8 demonstrate that, despite the descriptive statistics indicating that male learners had a slightly higher mean number of L1-related errors (M = 6.20, SD = 2.167) than female learners (M = 5.45, SD = 3.332), the difference was not statistically significant, t(32.631) = -0.844, p = .405. This implies that there is no difference in the overall frequency of prepositional errors attributed to L1 interference. Therefore, both learners appear to be similarly affected by first-language influence when using English prepositions.

Table 8

Independent-samples t-test for error due to L1 by gender

Variable	Gender		Independent t Test		
	Female	Male	t	df	Sig.
Error due to L1	5.45±3.332	6.20±2.167	-.844	32.631	.405

Content Analysis of Interview Responses

Concerning the interview with the participants, the most common difficulties were the influence of L1 and contextual and usage confusion, each reported by 33% of the sample, as shown in Table 9. Notably, female participants were more likely to attribute their challenges to L1 interference (3 F, 1 M). P3 stated, *"I faced a lot of challenges because I couldn't distinguish between English and Arabic prepositions"*. Similarly, P1 said, *"I find English prepositions easy to understand; however, I sometimes confuse them with Arabic prepositions"*, which indicates a subconscious reliance on L1 structures in learning English prepositions.

Table 9
The participants' interviews' results

Themes	Code Categories	F	M	(f)*	**
Challenges (Q1: What challenges do you face when learning English prepositions?	Influence of L1	3	1	4	33%
	Contextual and Usage Confusion	2	2	4	33%
	Difficulty in Memorization	0	1	1	8%
	No challenges	1	2	3	25%
L1 Influence on Errors (Q2: Have you noticed any common mistakes you make with English prepositions that might come from your first language (Arabic)?	Errors Related to L1	2	6	8	67%
	Errors not Related to L1	2	0	2	17%
	No L1 Impact	2	0	2	17%
Prepositional Learning Levels (Q3: Do you find certain English prepositions more difficult to learn than others? Why do you think that?	Difficulties Certain Types	3	2	5	42%
	Varied Perceptions	2	1	3	25%
	No noticeable difficulty	1	3	4	33%
Teacher's Role (Q4: Would it be helpful if teachers explained the differences and similarities between English and Arabic prepositions when correcting mistakes?	Agreement	4	4	8	67%
	Disagreement	2	2	4	33%
Improving Preposition Learning (5: How do you think learning English prepositions could be improved for you and your classmates?	Practice	5	4	9	75%
	Interactive Activities	1	2	3	25%

*Frequencies of participants' responses. **The percentage was calculated based on the total number of participants (n=12)

There was a 33% percentage for the second subtheme, with an equal distribution of responses between males and females (2 M, 2 F). Female P4 found it difficult to distinguish between prepositions, *"Maybe it's because I didn't know how to distinguish their uses in sentences, like in and at"*. Also, Male P4 shared that he struggled with selecting the correct preposition for specific situations, *"Yes, I face challenges when it comes to using English prepositions correctly, especially in choosing the right one for specific situations"*.

However, there was only one male participant who identified memorization as a problem (8%). P1 *"I'm not good at memorizing, so I tend to forget how to use them correctly"*, indicating that his learning strategy is based more on rote learning than contextual awareness. Meanwhile, 25% of the participants (2 M, 1 F) experienced no significant challenges. Female P5 mentioned that she did not struggle in general as well as the other male participant, although she often gets confused applying the correct preposition in sentences with days and months. *"Honestly, I didn't face many challenges, but when sentences included months and days, I used to get confused "*.

For the second question, the focus was on identifying whether students attributed their prepositional errors to L1 interference. As illustrated in Table 9, participants' responses to this question were divided into three subthemes: errors related to L1, Errors not

related to L1, and no L1 impact. The most prominent subtheme was errors related to L1, reported by 67% of participants, while both genders reported the impact of L1, male participants were more represented (2 F, 6 M). Male students were more likely to rely on their first language when using English prepositions

e.g., P5 *"I often make mistakes when speaking English because I choose the wrong preposition in a sentence due to influence from my first language".*

In contrast, 17% of participants (2 F) stated that their Errors were not related to L1. These learners acknowledged making mistakes but did not attribute them to L1 interference. *P1, "I sometimes make mistakes with prepositions, often overusing 'on' in different sentences."* However, she did not indicate that these errors stemmed from her native language; rather, they were due to language proficiency.

Another 17% (2 F) reported no L1 impact, expressing that Arabic played no role in their use of English prepositions. *Female P2* stated, *"I don't connect English prepositions with Arabic in my head,"* suggesting that they are more aware of the structural differences between Arabic and English and therefore avoid relying on L1 when using prepositions in English.

As for the third question, the most frequent subtheme was difficulties with certain types, reported by 42% of participants (3 F, 2 M). Learners expressed difficulties with specific prepositions such as *in, on, at*, and phrasal verbs. *Female P1* commented, *"I find the prepositions among, below, and above more difficult than others, and I often make mistakes with them."* Similarly, *Male P5* admitted, *"Sometimes I confuse time and place prepositions, especially 'in' and 'on'; those are the ones I mix up the most."* These responses indicate that both male and female learners struggle with spatial and temporal prepositions, particularly when their usage overlaps.

Among 33% of the respondents, no noticeable difficulty was reported by one female and three males. These students indicated that they perceive all prepositions as being on the same level of difficulty. Male P6 answered, *"No, I don't find any particular preposition more difficult than others; to me, they're all at the same level."* This suggests that male learners may be more accustomed to generalizing their learning experiences or less focused on analyzing individual usage patterns compared to female learners, who tended to articulate specific areas of confusion.

The final subtheme was noted by 25% of respondents (2 F, 1 M), reflecting more mixed attitudes. For instance, female P6 expressed, *"Yes, I find phrasal verbs hard because we don't use them much in everyday conversation... It's also hard to remember which preposition to use in specific situations."* On the other hand, female P3 countered, *"I find phrasal verbs easier because we usually memorize them."* These contrasting responses demonstrate how familiarity, exposure, and learning strategy (e.g., memorization) shape perceptions of difficulty across genders.

For the fourth question, participants' responses to whether teachers should explain the differences and similarities between English and Arabic prepositions fell into two main perspectives: agreement and disagreement. The majority (67%) supported the idea, including 8 students, viewing teacher explanation as a helpful tool for avoiding

confusion and reinforcing accurate prepositional usage. For instance, Female P4 mentioned, *"The teacher should explain the differences between Arabic and English prepositions so we can avoid making mistakes,"* while Male P6 also shared, *"I think the teacher should explain both the similarities and differences between them, so we don't keep repeating the same mistakes"*. The perceptions of both genders highlight that they believe teacher guidance and feedback on their errors are essential to help them avoid repeating the same errors.

Conversely, only one male and two female students expressed concerns that such comparisons might lead to confusion. For instance P5 reflects that, *"I don't think the teacher must explain the difference between English and Arabic prepositions, because it might confuse us more",* Moreover, the other male participant emphasized that it is the student's responsibility to learn prepositions independently, suggesting a preference for self-directed learning e.g., *"It's the student's responsibility to learn them, and the teacher's role is just to correct and guide when needed"*.

According to the fourth question responses, two primary subthemes were recognized: Practice and Exposure and Interactive Activities, as shown in Table 9. The most frequently mentioned approach was consistent use and exposure, reported by 58% of participants (3F, 4M). Learners emphasized the importance of applying prepositions regularly through speaking and writing. *"It can be improved through practice, especially by speaking and writing more in English"*, stated a male participant (M, P2). Likewise, a female participant (F, P3) reflected, *"I think practice is really important, because the more we use prepositions, the easier they become"*.

The second subtheme, Interactive Activities, was expressed by 42% of participants (3 F, 2 M), who highlighted the value of classroom games and engaging exercises. These participants felt that learning prepositions could be enhanced through dynamic and collaborative activities. One female P6 mentioned, *"We need to use prepositions more in our daily conversations and practice them in class through fun activities like games"*. Correspondingly, a male participant shared the same opinion with her, suggesting that prepositions should be practiced through *"engaging activities or games... so we don't forget how to use them correctly"*.

DISCUSSION

The analysis of both parts of the test—multiple-choice and short-answer—revealed a consistent pattern of errors in preposition usage among Saudi EFL learners, primarily driven by direct translation from Arabic. Participants frequently substituted English prepositions with those resembling Arabic equivalents, such as using "in" instead of "on" or "at." This was especially evident in responses to items involving spatial and directional contexts. These findings are supported by Alhammad's (2023) observation that the preposition "in" is overused due to the broader semantic range of its Arabic counterpart, "fi." Interview data further reinforced this trend, with several learners, particularly male participants, explicitly acknowledging their reliance on Arabic when selecting English prepositions. This confirms that negative transfer from L1 remains a dominant factor in prepositional errors.

The short-answer section also highlighted a significant struggle with phrasal verbs. Participants often avoided or misused these constructions, which lack direct equivalents in Arabic. This avoidance behavior was not only observable in test responses but also echoed in interviews, where learners expressed uncertainty and discomfort with phrasal verb usage. These findings align with Belarbi (2020), who attributes such difficulties to limited exposure and insufficient instructional focus. Alhassani's (2025) study similarly supports the notion that structural differences between English and Arabic hinder positive transfer, leading learners to avoid phrasal verbs altogether. Our data showed that learners with higher proficiency levels demonstrated better usage of phrasal verbs, suggesting that increased L2 input and contextual practice can mitigate avoidance and improve performance.

The overall results of this study reinforce existing literature on English preposition acquisition. The prevalence of substitution and omission errors observed in our participants' responses reflects the structural mismatches between Arabic and English, as emphasized by Alwreikat and Yunus (2020), Khalil (2022), and Hashim et al. (2024). Our findings also confirm that learners often guess or misuse prepositions in writing tasks, consistent with Alsariera (2024) and Al-Bawaleez and Abdullah (2023). These patterns were particularly noticeable in short-answer responses, where lexical gaps and syntactic interference led to frequent inaccuracies. Moreover, the types of errors identified, substitution, omission, and overgeneralization, mirror those reported by Djellab et al. (2021) and Alnajar and Hadwan (2023), further validating the impact of L1 interference.

Importantly, our study contributes original data showing that learners' errors are not random but systematically linked to Arabic syntactic structures. For example, the frequent misuse of "in" for "on" in spatial contexts, and the omission of prepositions in phrasal constructions, were directly traceable to Arabic sentence patterns. These insights underscore the need for instructional strategies that go beyond general grammar instruction and instead focus on contrastive analysis and contextualized practice.

Regarding gender differences, statistical analyses (independent samples t-test and chi-square) revealed no significant differences in most test items. However, certain items, such as "attached to your email" and "at the end of the street", did show notable gender-based variation. Male participants were more likely to substitute prepositions in spatial contexts, while female participants showed slightly higher omission rates. These item-specific differences suggest that gender may influence prepositional usage in nuanced ways. While Omari et al. (2023) found minimal gender differences overall, our data indicate that specific prepositional categories may be more sensitive to gender-related variation.

This interpretation is further supported by Alahmadi and Lahlali (2019), who reported that males and females exhibit different patterns of inter-language errors. Our findings echo their conclusion that substitution errors are more common among males, while females tend to omit prepositions more frequently. Additionally, Nagi (2023) observed that male learners performed better on spatial prepositions, which aligns with our item-level analysis. Although the overall gender effect was limited, these nuanced

differences suggest that cognitive and strategic factors may influence how learners process and apply prepositional knowledge.

In summary, the findings of this study provide empirical evidence that L1 interference is a persistent challenge in English preposition acquisition among Saudi EFL learners. The data also reveal subtle gender-related patterns that merit further investigation. These insights support the need for targeted instructional interventions that address structural mismatches, promote contextualized learning, and consider learner-specific variables such as gender and proficiency level.

CONCLUSIONS AND RECOMMENDATIONS

This study confirms that first language (L1) interference—particularly from Arabic—is a major factor contributing to errors in English preposition usage among Saudi EFL learners. The analysis revealed consistent patterns of substitution, omission, and avoidance, especially in the use of phrasal verbs and spatial prepositions. These errors stem from structural mismatches between Arabic and English and are compounded by limited exposure to authentic L2 input. While gender differences were generally minimal, item-specific variations suggest that male and female learners may process and apply prepositional knowledge differently in certain contexts.

To address the challenges identified in English preposition acquisition among Arabic-speaking learners, several instructional strategies are recommended. First, incorporating explicit contrastive analysis between Arabic and English prepositions can help learners recognize structural differences and reduce negative transfer. This approach enables students to understand how prepositions function differently across languages, fostering more accurate usage.

Second, integrating common phrasal verbs into curriculum content is essential. Learners often avoid these constructions due to unfamiliarity and lack of exposure. Providing contextualized practice opportunities can help reduce avoidance behavior and build confidence in using phrasal verbs correctly. Additionally, instructional materials should consider gender-sensitive strategies. Subtle differences in error correction preferences and learning approaches between male and female learners suggest the need for tailored support that enhances engagement and effectiveness.

Lastly, lexical enrichment should be prioritized. Expanding learners' exposure to varied lexical contexts through reading, writing, and multimedia resources can reduce reliance on L1 equivalents and improve overall language proficiency. These strategies collectively aim to enhance learners' prepositional competence and mitigate the influence of L1 interference.

SUGGESTION

Future research should delve deeper into the semantic and pragmatic dimensions of prepositional errors to uncover underlying cognitive processing challenges. Investigating how learners interpret and apply meaning in context can offer valuable insights into error patterns. Moreover, exploring phonological and lexical influences on prepositional accuracy across different proficiency levels may reveal developmental trends and instructional needs.

Longitudinal studies are also recommended to track the progression of prepositional competence over time and assess the impact of targeted interventions. In addition, examining gender-related cognitive strategies using qualitative methods—such as think-aloud protocols or learner diaries—can provide a richer understanding of how learners approach language tasks.

Finally, expanding the participant pool to include learners from diverse educational backgrounds and regions will enhance the generalizability of findings. Such diversity can uncover broader patterns of L1 interference and inform more inclusive and effective pedagogical practices.

ACKNOWLEDGMENTS

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