FIRST LANGUAGE TRANSFER IN THE ACQUISITION OF ENGLISH PREPOSITIONS BY JORDANIAN EFL LEARNERS

Yazan Shaker Okla Almahammed

UNIVERSITI SA bfs ISLAM MALAYSIA
FIRST LANGUAGE TRANSFER IN THE ACQUISITION OF ENGLISH PREPOSITIONS BY JORDANIAN EFL LEARNERS

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Nilai

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DEDICATION

To the soul of my great father Dr. Shaker AL-Mahammed who always encouraged me to take the road less travelled and that brought me all success. “May Allah shower him with his mercy and accept him in his paradise”.

To my beloved mother Fatima AL- Hawari who without her I would not be who I am today.

To my darling wife for her unwavering help and encouragement.

To my dear brothers and sister for their heartfelt and sincere support throughout the period of my study.

To my aunts and uncles, especially Yousef “May Allah grant him a long life and a perfect health”.

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ABSTRAK


Akhir sekali, hasil-hasil dapatan menunjukkan bahawa Bahasa Arab Standard Moden mengakibatkan lebih banyak kesalahan pemindahan apabila memahami kata sendi Bahasa Inggeris berbanding Bahasa Arab Harian. Kajian ini menyokong pandangan sederhana pemindahan Bahasa, dan mempunyai beberapa implikasi terhadap penulis-penulis buku teks dan pengajaran kata sendi Bahasa Inggeris kepada penutur EFL.
ABSTRACT

Language transfer has an immense influence on all subsystems of the second language. Traditionally, the concept of language transfer was viewed as the effect of first language on the acquisition of the second language. Language transfer can be categorized into two types; negative transfer which stems from differences between first language and target language and positive transfer which results from similarities between two languages in contrast. This study aimed primarily at investigating negative Arabic transfer in the acquisition of English prepositions by Jordanian EFL learners. English prepositions constitute a learning problem for Jordanian EFL learners. Fill-in-the-blank test, grammaticality judgment and correction task and cloze test were used to collect data. A total of 355 Jordanian EFL learners at bachelor degree level participated in this quantitative study. The respondents were selected from ten universities in Jordan via cluster random sampling procedures. The study revealed the following main findings; negative Arabic transfer affected the acquisition of English prepositions. About 35.2% of prepositional errors resulted from negative Arabic transfer. The acquisition of English prepositions was influenced noticeably by intralingual interference. It was found that 64.8% of prepositional errors were ascribed to intralingual interference. The results also revealed that preposition combinations was the most difficult usage of English prepositions for Jordanian EFL learners. The proportion of errors in the use of preposition combinations was 65.2%. With reference to the use of pied-piping and preposition stranding in interrogatives, the analysis displayed that the respondents showed no preference of pied piping over preposition stranding and vice versa.

The results of the study supported the moderate position, which holds that both language transfer and intralingual interference interact in shaping the acquisition of English prepositions. The study has some implications for textbook authors and the teaching of English prepositions to EFL learners.
MULAKHAS AL-BAHTH

 يؤثر التدخل اللغوي على اللغة الثانية بشكل كبير. تاريخيا تم إظهار مفهوم التدخل اللغوي على أنه تأثير اللغة الأولى على اكتساب اللغة الثانية. يقسم التدخل اللغوي إلى نوعين: التدخل السلبي والذي ينتج من الاختلافات بين اللغة الأولى واللغة الثانية والتدخل الإيجابي والذي ينتج من التشابه بين لغتين متناقضتين. هذه الدراسة بشكل رئيسي إلى استشارة دور التدخل السلبي من اللغة الأولى في اكتساب حروف الجر الإنجليزية من قبل الطلبة الأردنيين الناطقين باللغة الإنجليزية كلغة أجنبية. تشكل حروف الجر الإنجليزية مشكلة تعليمية للطلاب الأردنيين. استخدم الباحث اختيار ملو الفواتح والمختصرات لتصحيحها واختبار النص من أجل جمع البيانات المطلوبة. تكوّنت عينة الدراسة من 355 طالب أردني في مرحلة البكالوريوس. تم اختبار التلاميذ من عشر جامعات أردنية ببطريقة العينة العشوائية العكسية. أظهرت الدراسة النتائج التالية: أثر التدخل السلبي من اللغة العربية على اكتساب حروف الجر الإنجليزية حيث أن 35.2% من الأخطاء يمكن عزوها إلى التأثير السلبي من اللغة العربية. كما أظهرت النتائج أن اكتساب حروف الجر الإنجليزية قد تتأثر بشكل ملحوظ بالتدخل من اللغة الإنجليزية نفسها، حيث أن 64.8% من الأخطاء المرتبكة في استخدام حروف الجر الإنجليزية ترجع إلى تأثير اللغة الإنجليزية نفسها. أشارت النتائج أيضا إلى أن حروف الجر المقترنة مع اسم أو فعل أو صفة تشكل الاستخدام الأصعب للطلبة الأردنيين حيث شكلت هذه الأخطاء 65.2% من مجموع الإجابات المقدمة من قبل المشاركين في هذا الاستخدام. كما أكدت نتائج الدراسة أن المشاركين لم يظهروا أي تفضيل للاستخدام حروف الجر المقترنة ببعضه عند إبقاء الكلام على حروف الجر غير المقترنة ببعضه عند إنهاء الكلام أو الاختيار. قدمت هذه الدراسة دعم لوجهة النظر المعتدلة التي تنص على أن كل من التدخل من اللغة الأولى والتدخل من اللغة الثانية يساهم في اكتساب حروف الجر الإنجليزية. كما قدمت هذه الدراسة مقترحات تتعلق بتدريب حروف الجر الإنجليزية.
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# ABBREVIATIONS

<table>
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<th>Abbreviation</th>
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<tr>
<td>C</td>
<td>Complementizer</td>
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<tr>
<td>CP</td>
<td>Complementizer Phrase</td>
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<tr>
<td>CA</td>
<td>Contrastive Analysis</td>
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<td>EA</td>
<td>Error Analysis</td>
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<td>EFL</td>
<td>English as a Foreign Language</td>
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<td>ESL</td>
<td>English as a Second Language</td>
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<td>L1</td>
<td>First Language</td>
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<td>L2</td>
<td>Second Language</td>
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<td>NL</td>
<td>Native Language</td>
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<td>PP</td>
<td>Prepositional Phrase</td>
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<td>TP</td>
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CHAPTER ONE

1. Introduction

The introductory chapter of the thesis includes the following sections; introduction, background of the study, statement of the problem, objectives of the study, research questions, significance of the study, limitations of the study and definition of terms.

1.1 Background of the study;

It is believed that first language (L1) transfer is a fundamental aspect of second language acquisition (SLA), language teaching and language learning. The early discussion about L1 transfer began with the work of the two American linguists; Charles Fries and Robert Lado in the 1940s and 1950s of the last century. L1 transfer was traditionally viewed as the influence of L1 on the acquisition of the second language (L2) (Gass & Selinker 2008; Jarvis, 2000; Jarvis & Crossley, 2012; Kwon & Han, 2008; Lado, 1957; Odlin, 1989). The concept of L1 transfer is associated historically with the behaviourism theory, which holds that language transfer is a consequence of habit formation process (Odlin, 1989). The behaviourist view believes that, the problems that L2 speakers encounter do not stem from difficulties in the structures of L2 themselves, but rather, from the habits of L1 that interfere in the acquisition of L2. This is in line with Fries (1957 as cited in Gass & Selinker, 2008, p.95) who stated that “the basic problems arise not out of any essential difficulty in the features of the new language themselves but primarily out of the special set created by the first language habits.” For the purpose of predicting errors resulting from L1 transfer when acquiring L2, behaviourism theory employed Contrastive Analysis (CA) approach.
In carrying out the CA studies, one needs to do a systematic structure by structure comparison of the phonological system, syntactic system, morphological system and the cultural system of L1 and L2 for the ultimate purpose of identifying the differences and similarities between the two languages (Lado, 1957, as cited in Gass & Selinker, 2008).

Two types of language transfer can be distinguished; positive transfer which refers to “the use of the first language (or other languages known) in a second language context when the resulting second language form is correct” and negative transfer which is defined as “the use of the first language (or other languages known) in a second language context resulting in a non-target-like second language form” (Gass & Selinker, 2008, p.520). In other words, similarities between the learner’s native language (NL) and target language lead to positive transfer, whereas differences between the two languages cause negative transfer. Negative transfer is relatively easy to be determined because it is equated with the occurrence of errors and in turn, impedes acquiring L2. In contrast, positive transfer facilitates acquiring L2 forms (Talebi, 2014).

Transfer from L1 was acknowledged by many researchers as a significant factor affecting the acquisition of L2 structures (Bartelt, 1983; Elnabih, 2010; Phoocharoensil, 2013; Simic, 2010, Tahaihne, 2010). This premise was supported by Gass and Silenker (1992, p. 7) who pointed out that, “there is now overwhelming evidence that language transfer is indeed a real and central phenomenon that must be considered in any full account of the second language acquisition process.” This suggests that, any L2 research aims at providing satisfactory account for the acquisition of L2 needs to examine the influences resulting from native language. Ellis (1985, p. 19) stated that, “it is a popular belief that second language acquisition (SLA) is strongly influenced by the learner’s first language (L1).” This is in agreement with Odlin (1989, p. 24)
who argued that “much of the empirical research in the 1970s and 1980s has led to new and ever more persuasive evidence for the importance of transfer in all subsystems.”

For the purpose of proving the significant role of L1 transfer in the acquisition of L2, a large body of research has been conducted on different L2 sub-systems. In the area of phonology, Simic (2010) carried out a study on the role of transfer from Arabic (L1) in the perception and production of English vowels. Forty one Arab learners of English took part in this study. The researcher arrived at the conclusion that, the acquisition of English vowels by Arab EFL learners depended largely on their native language. Thus, language transfer is an influential factor in the acquisition of English vowels.

In the area of syntax, Elnabih (2010) investigated the acquisition of causative-inchoative alternation by Arab learners of English. The study aimed at exploring the correlation between transfer from L1, English proficiency level and the role of Universal Grammar (UG) in the interlanguage representations of Arab learners. The author reached the conclusion that, English causative-inchoative alternation causes learning difficulties for Arab EFL learners. The study also showed that, transfer from Arabic is the chief source of errors committed by those learners since Arabic is different from English with respect to encoding causative-inchoative alternation. Furthermore, transfer is also operative in the field of discourse; Bartelt (1983) investigated the use of repetition in the writing of American Indian EFL learners. The native languages for those learners are Navajo and Apache. These two languages are characterized by the overuse of repetition for emphasis. The results of the study revealed that, Navajo and Apache speakers of English are strongly affected by their native languages. This is because; those speakers produced much repetition forms when compared to the norms of English writing style.
Another study implemented in the area of semantics by Phoocharoensil (2013) who investigated the impact of language transfer on the acquisition of English collocations by EFL learners whose mother tongue is Thai. The participants in the study consisted of 90 first year Thai EFL learners at Thammasat University. The results of the study revealed that, transfer from native language plays a substantial role in the acquisition of English collocations. In other words, native language transfer is the primary strategy that the participants employ in their use of English collocations.

Based on the results of the aforementioned studies, one could claim that, L1 transfer is a real and a significant phenomenon that should be taken into consideration by any study conducted on the acquisition of L2. The significance of L1 transfer stems from the following three facts; first, transfer from L1 does not affect one language subsystem and leaves the others, but rather L1 transfer exerts immense influence on all language subsystems as stated in the studies above. Second, L2 learners from different L1 backgrounds rely on transfer from L1 when acquiring the structures of L2. More specifically, transfer from L1 into L2 occurs regardless of the language being acquired. Third, transfer from L1 (negative or positive) takes place regardless of the distance between two languages in contrast. These reasons make researching the influences result from L1 transfer a demanding and pressing issue that need further attention by researchers.

In spite of the significant role that language transfer plays in the acquisition process of L2, some researchers questioned this role in favour of the developmental factor (Gass & Selinker, 2008). Such sceptical view of the role of language transfer was led by the two researchers, Dulay and Burt (1973, 1974, 1975), who conducted a series of studies on children from different L1s acquiring English as L2. The results of their studies showed a strong evidence
for the presence of the developmental factor in the acquisition of L2. The findings of Dulay and Burt’s studies also revealed that, L1 transfer has a minimal effect on the acquisition of L2. This means that errors committed by L2 learners are primarily developmental or intralingual in nature rather than L1-based. These findings led Dulay and Burt to claim that children acquire their L2s in similar patterns irrespective of their mother tongue or the language being acquired. Other studies implemented by Bailey, Madden and Krashen (1974) and Fathman (1975) revealed similar results to those done by Dulay and Burt (1973, 1974, 1975). These studies indicated that, the acquisition process of L1 and L2 showed evidence of fixed developmental sequence. Thus, target language errors are not seen as a consequence of transfer from NL, but rather, they are developmental or intralingual errors.

In this regard, it is appropriate to say that the scepticism over language transfer does not stem from increasing empirical research. For some researchers (e.g., Bailey, Madden & Krashen 1974; Dulay & Burt 1973, 1974, 1975; Fathman, 1975), L1 transfer is disregarded because of its past association with the behaviourism theory which is criticized for some shortcomings. According to Odlin (1989), the sceptical view of language transfer is questionable on both empirical and theoretical grounds. Odlin (1989) summarized critiques of the sceptical view of language transfer in three main points; first, one of the flaws of this position is the overemphasis on errors. It is believed that errors provide us with a significant evidence for the strengths and weaknesses of L1 influence, but they are not the only evidence we should rely on. The second problem is with the assumption that, the developmental factor has the main impact on the acquisition of L2 while the role of L1 transfer is minimal. However, there are reasons to believe that, the developmental factor works in tandem with transfer from L1 in shaping the process of L2 acquisition. The third problem with this position is the limited scope of
investigation. In other words, this position placed its emphasis only on the areas of morphology and syntax, while other L2 sub-systems were ignored.

With reference to the above discussion, it could be said that, some researchers such as Dulay and Burt (1973, 1974, 1975) claimed a minimal role for L1 transfer in favour of the developmental factor or intralingual interference, whereas others asserted that, L1 transfer has an influential role in the acquisition of L2 (Fries, 1957; Gass & Selinker 1992; Lado, 1957; Odlin, 1989). In a bid to make a compromise between the supporters of the developmental view and the defenders of the role of language transfer, a moderate position emerged. This position assumes that, L2 learners’ errors reflect the characteristics of both transfer from L1 and the developmental factor or intralingual interference (Ellis, 1985). To be more specific, L1 transfer interplays with the developmental factors in forming structures of L2. This position was reported by Odlin (1989, p.23) who stated that “there are reasons to believe that, cross-linguistic influences work in tandem with the psychological factors governing developmental sequences.” In other words, errors committed by L2 learners cannot be completely caused by language transfer but rather, the developmental factor or intralingual interference plays a role in this process.

In agreement with the moderate position, Richards (1974) sorted the errors committed by L2 learners in terms of their sources into two main types.

1- Interlingual errors: errors ascribed to transfer from mother language.

2- Intralingual errors and developmental errors: errors that result from difficulty in the acquisition of the target language itself. Many current studies have supported the moderate position, where errors committed by L2 learners can be attributable to both language transfer and the developmental factor or intralingual interference (Bilal et al,
This particular study adopted the position that counts L1 transfer as an important source of errors committed by L2 learners. The impetus beyond supporting the position of L1 transfer in this particular study is that, the differences between the subsystems of English and Arabic language are great because the two languages belong to two distinct families (Alhaj, 2015). Such differences would motivate the participants to commit many errors due to transfer from native language when they lack the required knowledge of English. This is in agreement with Lindstromberg (2010, p. 5) who argued that, “More often perhaps, mistakes stem from differences between English and the mother tongue.” Thus, these large differences between the two languages motivated the researcher to support the view of language transfer as a significant factor affecting the acquisition of L2. In addition to language transfer, this study investigated intralingual interference as an effective source of errors accompanying transfer from L1.

Having discussed some issues related to language transfer; definition, types of language transfer, the role of language transfer in different L2 subsystems, the sceptical view of language transfer, the critique directed against this sceptical view and the moderate position, it is fitting to indicate that, transfer from L1 interplays with some external factors in shaping the structures of L2. Jarvis (2000) listed nine factors that interact with L1 transfer. He ordered the interacting factors as follows; age, personality, motivation and language attitude, social, educational and cultural background, language background (all previous L1s and L2s), type and amount of target language exposure, target language proficiency, language distance between the L1 and the target language, task type and area of language use and prototypicality and markedness of the language feature. Besides, Maria (2010) pointed to other factors that work in
tandem with lexical transfer, namely; L2 proficiency level, L1 background, motivation and gender. This study took into consideration L2 proficiency level and gender as important factors interacting with transfer from L1. These two factors were particularly examined in this study because much debate among linguistics has taken place upon their relationship with language transfer as shown below. Investigating these two factors would supply us with through knowledge on their actual relationship with language transfer.

The first factor that was examined in this study is the L2 proficiency level. Based on literature, the actual relationship between L1 transfer and L2 proficiency underwent much controversy. Some researchers asserted that, as L2 proficiency level increases, L1 transfer decreases (Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013). However, this view was not shared by other researchers who declared that, language transfer is not conditioned by L2 proficiency level (Bhardwaj, 1986; Hadadi, Goodarz & Abbasi, 2014; Hussein & Mohammad, 2011; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). In other words, the effect of language transfer either remains stable across different proficiency levels or L2 learners at advanced stages rely on their L1s more than learners at lower stages. Thus, L2 proficiency level was investigated in this study in order to gain more insight into its actual correlation with language transfer.

The second factor that was investigated in this particular study is gender. Based on literature, the correlation between language transfer and gender is still inconclusive. Some researchers indicated that, there are differences between EFL males and females regarding reliance on L1 when acquiring L2 (Al Yaari & Almaflehi, 2013; Catalán & Alba, 2008; Li, 2004; Stapa & Irtaimeh 2012). Other researchers argued that males and females resort to their mother tongue equally (Abusaeedi, Asghar & Faezeh, 2015; Agustín Llach, 2009a; Cheng 2001). Hence,
gender factor was examined in this study in order to acquire more knowledge on the relationship between gender and language transfer.

It is important to indicate that, the present study placed its concern on writing proficiency since writing is one of the most challenging language skills for the Arab EFL learners. According to Al-Khresheh (2010), despite the fact that Jordanian school students study English for long period, they are still incapable of writing a single sentence without committing errors. This statement is in agreement with Rababah (2003, p. 16) who stated that, “Arab learners of English encounter problems in both speaking and writing.” Writing proficiency is defined by East (2008) as writing performance or assessment of language acquisition, which aims at testing the speakers’ knowledge of the major components of the writing construct such as grammar and vocabulary. It is noteworthy that, the term ‘L2 proficiency’ is used throughout this study in referring to writing proficiency because oral proficiency is beyond the scope of the study.

This study examined the effect of transfer from Arabic language on one of the most difficult areas in English language; namely prepositions. Some studies indicated that, English prepositions are highly problematic for non-native speakers of English (Abd & Shah, 2014; Bilal et al., 2013; Delija & Koruti, 2013; Hariri, 2012; Yousefi, Soori & Janfaza, 2014). Studies implemented by (Bilal et al., 2013; Delija & Koruti, 2013; Yousefi, Soori & Janfaza, 2014) asserted that, the difficulty in the use of English prepositions stems mainly from negative transfer from L1. Yousefi, Soori and Janfaza, (2014) investigated the most frequent errors in the use of prepositions among Iranian EFL learners. The primary purpose of the study was determine the main sources of errors made by the participants. A multiple choice test is used to collect the data from 35 Iranian EFL learners. The results of the study indicated that, most of prepositional errors committed by the participants were due to negative transfer from L1, whereas the rest of errors
resulted from intralingual interference. This is in agreement with the results of a study carried out by Bilal, et al (2013) who examined the use of English prepositions by Pakistani ESL learners. The study sample was comprised of 100 written compositions gathered at random from different schools in Pakistan. The results of the study revealed that, the vast majority of errors made in the use of English prepositions can be ascribed to transfer from L1 (Urdu), whereas the remainder of prepositional errors were caused by intralingual interference. Another study shares the results of Bilal, et al, (2013) and Yousefi, Soori and Janfaza, (2014) conducted by Delija and Koruti (2013) who investigated challenges in teaching English prepositions. For the purpose of collecting the required data for the study, the researchers used a questionnaire distributed to Albanian English language teachers. The findings of the study related to the sources of prepositional errors indicated that, transfer from L1 was found to be the major cause of errors. One could claim that, mastering English prepositions depends to a considerable extent on the degree to which EFL learners rely negatively or positively on their L1s. Positive transfer accelerates the acquisition of this area of language whereas, negative transfer delays the acquisition process. Therefore, researching the influences result from L1 transfer helps in providing better account of how English prepositions are acquired by L2 learners whose mother language is Arabic.

Prepositions in English are used to express different meanings. Quirk et al. (1985) classified the meanings that English prepositions express into the following categories: prepositions indicating spatial relationship, prepositions indicating temporal relationship, prepositions denoting cause or purpose relationship, prepositions indicating means or agentive relationship, prepositions expressing the notion of accompaniment, prepositions expressing the notion of support or opposition and prepositions indicating concession or respect relationship. In addition to the formerly mentioned usages, English prepositions can combine with particular
noun, verb and adjective in what is termed preposition combinations. It is believed that, preposition combinations are highly difficult for non-native speakers to master. This is in line with Robinson (2009, p.1) who argued that “many prepositions that follow nouns, verbs, and adjectives are unpredictable, making their use highly idiomatic.” According to Grubic (2004), prepositions that combine with certain verbs, nouns and adjectives should be acquired as an essential part of the lexical unit they accompany.

English prepositions are divided into two types according to the number of words a preposition contains. 1- Simple prepositions. This type of prepositions comprises only a single word such as in, to, for, at, of, with, about, on and by; 2- Complex prepositions. This type of prepositions is composed of two or three words such as according to and with regard to (Ballard, 2013). Complex prepositions are often regarded as an open class, meaning that they have no restricted number because new combinations can be invented and incorporated into the language (Grubic, 2004; Macková, 2012).

The placement of English prepositions result in two varieties; preposition pied piping and preposition stranding. Pied piping refers to the construction where the whole prepositional phrase (PP) ‘a preposition and its complement’ moves to the front part of the sentence, while preposition stranding is a syntactic structure where a preposition is left in a delayed or stranded position at the end of the sentence without following by any complement (Denison, 1998). It is observed that preposition pied piping exists in all languages, whereas the availability of preposition stranding undergoes cross-linguistic variation (Sadighi, Parhizgar & Saadat, 2004). English language permits both preposition stranding and pied piping, while Arabic language allows pied piping and prohibits preposition stranding ( Mavandi & Gorjian 2014). Preposition stranding and pied piping exist mainly in the construction of WH ‘interrogatives’ and relative
clauses. The following examples show instances of preposition pied piping in interrogatives and relative clauses.

1- **About** what was she talking? (Pied piping in interrogatives)

2- The girl **to** whom I talked was my student last semester. (Pied piping in relative clauses)

The examples below are on preposition stranding in interrogatives and relative clauses

3- What was she talking **about**? (Preposition stranding in interrogatives)

4- The girl who I talked **to** was my student last semester. (Preposition stranding in relative clauses)

Having briefly described prepositions in English, it is of a great significance to indicate that prepositions in Arabic language have some similarities and differences to their English counterparts. Prepositions in Arabic language can be used to express the following meanings: prepositions indicating temporal and spatial relationships, prepositions indicating resemblance relationship, preposition denoting possession relationship, prepositions denoting cause or purpose relationship, and prepositions denoting accompaniment and exception relationship (Alayesh, 2012; Al-marrani, 2009). Moreover, prepositions in Arabic language can be sorted into two classes: 1- True prepositions such as fii and ʕəla and 2- Semi-prepositions such as Təht and qəbl (Saeed, 2014).

In Arabic, there are three language verities; Classical Arabic, Modern Standard Arabic and Colloquial Arabic. Classical Arabic is known as the language of holy Quran and pre-Islamic poetry. Modern standard Arabic is viewed as the language of newspapers, letters, modern writers, books and magazines. It is also the language of formal speeches on TV and radio.
Finally, Colloquial Arabic is deemed as the language of everyday speech in the Arab countries. This variety of language has no written contexts, meaning that Colloquial Arabic is not used as a medium of writing at all (Belkredim and Sebai, 2009). The present study takes into account both Modern Standard Arabic and Colloquial Arabic as the main sources of transfer from Arabic. Classical Arabic is beyond the scope of the present study.

The selection of prepositions used in this study is based on two main criteria. First, frequency of prepositions in the language. To be more specific, the researcher paid more attention at the most frequently used prepositions in English language, such as *in, to, for, at, of, with, about, on and by* (Burton, 2011). These prepositions cause the highest proportion of errors ascribed to negative transfer from L1 (Blom, 2006; Tahaineh, 2010). Second, differences and similarities in usage. The selection of prepositions utilized in this particular study rested on cases where prepositions in both English and Arabic act differently as well as cases of similarities between the two prepositional systems. This would help in determining instances of negative transfer from Arabic and positive transfer as well.

In light of what was discussed above, this study sought primarily to investigate Arabic language transfer in the acquisition of English prepositions by the Jordanian EFL learners. Having reviewed the background of the present study, which discussed mainly the phenomenon of language transfer and English prepositional system, the subsequent section is devoted for revealing statement of the problem of the current study.
1.2 Statement of the problem

English prepositions are highly problematic for EFL learners in general (Abd & Shah, 2014; Erarslan & Hol, 2014; Galleguillos, 2013; Hariri, 2012; Jalali & Shojaei, 2012; Yousefi, Soori & Janfaza, 2014) and for Arab learners of English in particular (Al-Hassan, 2013; Al-Qudah, 2013; Hasan & Abdullah, 2009; Tahaineh, 2010; Terdjat, 2012). The difficulties that Arab EFL learners encounter when acquiring English prepositions stem from the large differences between English prepositions and their Arabic counterparts (Hasan & Abdullah 2009). These differences are best exhibited by the lack of one to one relationship between English and Arabic prepositions. More precisely, English language contains some prepositions that do not exist in Arabic or do not have equivalents in Arabic. One more aspect of the differences between English and Arabic prepositions is that; prepositions in English can be grouped as complex and simple, while Arabic does not have such classification where all prepositions are simple. In addition, many prepositions that are present in English language cannot be treated as prepositions in Arabic, but adverbs such as the prepositions above, over, under, below. Another source of difficulties when acquiring prepositions in English is that, some English prepositions are combined with particular nouns, verbs and adjectives, making their use highly problematic for Arab learners of English. As a consequence of such differences between English and Arabic prepositional systems, Arab EFL learners commit a considerable amount of errors due to transfer from native language (Hasan & Abdullah 2009; Tahaineh 2010).

The difficulties in acquiring English prepositions were observed by many researchers who implemented studies on both Arab and non-Arab learners of English. As for research conducted on the non-Arab learners of English, Jalali and Shojaei (2012) examined the developmental and fossilized prepositional errors among the Iranian EFL learners. Each
participant in the study was required to take four composition tests. The findings of the study revealed that, the majority of the participants committed fossilized errors in their use of English prepositions. This means that prepositions constitute a serious problem for those participants. Furthermore, Erarslan and Hol (2014) investigated the influence of language transfer on the acquisition of vocabulary, tense and prepositions by Turkish EFL learners. The researchers came to the conclusion that, most of negative transfer errors occurred in the use of prepositions, followed by vocabulary and tense respectively. Erarslan and Hol’s results are consistent with the findings of a study carried out by Hariri, (2012) who analyzed Morpho-Syntactic errors made by Iranian EFL learners when acquiring English as L2. The researcher concluded that, errors are mostly committed in the use of prepositions, followed by the use of articles.

Amongst those who admitted the extreme difficulty of English prepositions are Chodorow, Tetreault and Han (2007) who stated that, in spite of the common use of English prepositions, they earned a reputation of extreme difficulty. This is in line with Galleguillos, (2013) who argued that the acquisition process of English prepositions is very challenging for primary and secondary EFL learners.

The results of the aforesaid studies are in agreement with some studies conducted on the Arab EFL learners. Al-Qudah (2013) conducted a study on the acquisition of some prepositions of time by the Jordanian EFL learners. The prepositions that were examined in this study are; at, to, in, for, after, before, during, from, since, on, while and until. The results of the study related to the acquisition of these prepositions indicated that, prepositions of time are extremely troublesome and difficult to acquire by the Jordanian EFL learners. These results are compatible with the findings of a study carried out by Hasan and Abdullah (2009) who examined the use of prepositions among the Arab EFL learners. The participants consisted of Masters and
PhD Arab students at UPM (Universiti Putra Malaysia) in Malaysia. The researchers arrived at the conclusion that, English prepositions constitute great learning problems for the Arab EFL learners.

Chelli, (2013) conducted a study on the interlingual and intralingual errors in the use of English articles and prepositions by Arab EFL learners at Biskra University in Algeria. The researcher found out that, English prepositions form a huge difficulty for the participants due to negative transfer from Arabic, where 79% of prepositional errors can be ascribed to L1 transfer. The results of this study are in support of a study carried out by Hassan (2013) who examined the impact of Arabic language on the writing of the EFL learners at University of Petra. The study examined the semantic, syntactic, lexical, grammatical and capitalization errors. The researcher concluded that, English prepositions are an area of language that causes great grammatical problems for the Arab EFL learners. This view is shared by Kharma and Hajjaj (1997) who implemented a study on the syntactic errors among the Arab EFL learners. They found that, the most frequent errors are in the use of prepositions and concluded that, prepositions are the most difficult aspect of English syntax. Other researchers conducted a series of studies on writing errors among Arab learners of English (Al-Khataybeh, 1992; Rababah, 2001, 2003). The findings of these studies revealed that, English prepositions are highly problematic and disturbing for Arab EFL learners in general and for Jordanian learners of English in particular. This view is shared by a group of researchers who implemented studies on syntactic errors committed by Arab EFL learners (Mohammed, 2005 Muortaga, 2004; Zahid, 2006). The findings of these studies showed that, Arab EFL learners are inefficient and weak mainly in the use of English prepositions and verbs.
The erroneous use of English prepositions is attributed by many researchers chiefly to negative transfer from Arabic language (Al-Hassan, 2013; Asma, 2010; Chelli, 2013; Hasan & Abdullah, 2009). One of the most important works on this issue was conducted by Tahaineh (2010) who pointed out that, the improper use of English prepositions is common among the Jordanian EFL learners even at the advanced stages of L2 acquisition. The findings also revealed that, the main source of prepositional errors is negative transfer from L1 (Arabic) or mother tongue interference which constituted 58% of the total errors.

However, most of the previous studies that reported the faulty usage of English prepositions by the Jordanian EFL learners did not examine the acquisition of prepositions per se (Al-Hassan, 2013; Chelli, 2013; Kharma & Hajjaj, 1997; Mohammed, 2005; Muortaga, 2004; Zahid, 2006). These studies investigated syntactic and grammatical errors in general, including errors in the use of prepositions. To be more specific, in spite of the substantial role of prepositions in building well-formed L2 sentences and the continuity of their faulty usage among the Arab EFL learners, the emphasis placed on the English prepositions in Jordan is little (Tahaineh 2010). Previous studies carried out solely on the acquisition of English prepositions are very scant, (e.g. Al-Qudah, 2013; Bdour, 1989; Tahaineh 2010). Studies conducted on English prepositions focused significantly on the acquisition of the semantic aspect of prepositions and little attention was given to constructions such as preposition stranding and pied piping. Focusing on one aspect of prepositions would not result in a thorough understanding of the problems that the EFL learners encounter. Moreover, these studies restricted their investigation to one educational institution such as a school or a university, which limits the generalizability of the findings. To the best of researcher’s knowledge, there is a lack of studies that investigated the use of English prepositions in many universities in Jordan. Therefore, the
present study is an endeavour to bridge a gap in the literature by investigating the acquisition of English prepositions in general, alongside preposition stranding and pied piping. This is in order to gain a better understanding on the acquisition of English prepositions. Unlike previous studies (Al-Qudah, 2013; Bdour, 1989; Tahaineh 2010) the sample of this study included a large number of universities, representing different parts of the country. This is to ensure maximum representativeness of the findings to the whole population of the study. This study also compared the different usages of English prepositions with one another in order to explore the most problematic use for the Jordanian EFL learners, which is rarely done in previous studies. Previous studies (Al-Qudah, 2013; Bdour, 1989; Tahaineh 2010) showed the most difficult prepositions in isolation of the usage in which they occur. Specifying the most difficult usage (e.g. temporal, spatial) of prepositions would provide us with a deep comprehension of the problems that the Jordanian EFL learners confront in the use of this area of language.

1.3 Objectives of the study

This study attempted to achieve the following objectives.

1- To investigate the influence of negative Arabic transfer on the acquisition of English prepositions by Jordanian EFL learners.

2- To investigate the influence of intralingual interference on using English prepositions by Jordanian EFL learners.

3- To identify the most difficult usage of English prepositions for Jordanian EFL learners to acquire.

4- To investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives.
5- To investigate whether there are any significant differences among English language proficiency levels in terms of negative Arabic transfer when acquiring English prepositions.

6- To investigate whether there are any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions.

1.4 Research questions

In order to achieve the objectives of this study, six research questions were posed as follows:

Question 1: Does negative Arabic transfer influence the acquisition of English prepositions by Jordanian EFL learners?

Question 2: Does intralingual interference contribute to the errors in the acquisition of English prepositions by Jordanian EFL learners?

Question 3: Which of the different usages of English prepositions is the most difficult for Jordanian EFL learners to acquire?

Question 4: Do the Jordanian EFL learners show preference toward pied-piping in interrogatives over preposition stranding due to the absence of preposition stranding from Arabic?

Question 5: Are there any significant differences among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions?

Question 6: Are there any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions?
1. 5 Significance of the study

The present study is significant in the following ways:

First, English prepositions are amongst the most difficult structures for the EFL learners in general (Abd & Shah, 2014; Erarslan & Hol, 2014; Galleguillos, 2013; Jalali & Shojaei, 2012) and for the Arab EFL learners, in particular (Al-Hassan, 2013; Al-Qudah, 2013; Hasan & Abdullah, 2009; Tahaineh, 2010; Terdjat, 2012). The difficulty arises from the differences in usages between English prepositions and their Arabic counterparts. The present study hopes to highlight these difficulties and analyze the errors that the Jordanian EFL learners tend to commit in their use of English prepositions. It is hoped that, the analysis of the errors resulting from the improper use of English prepositions will be of a great help for both the English language instructors and the Jordanian EFL learners. Such analysis of errors provides English language instructors with insight into the nature of problems that the EFL learners encounter in acquiring English prepositions. This would help in finding remedial solutions for these problems. Analyzing errors also could raise the awareness of the Jordanian EFL learners about the challenging areas when acquiring English prepositions. More specifically, the analysis of errors would give the EFL learners insight into the most difficult usage of prepositions as well as the most problematic preposition for those learners.

Second, this study presents a cross-linguistic comparison between English and Arabic prepositions. The comparison focuses on three main points in each prepositional system namely: forms, functions and usages. This differs from the comparisons presented in previous studies (Alayesh, 2012; Asma, 2010; Habash, 1982), which were focusing more on the spatial and temporal usages of English and Arabic prepositions. The present study compares six usages of
prepositions in the two languages. A more comprehensive comparison could help in pinpointing the areas of similarities and differences between prepositions in both English and Arabic language. Determining such similarities and differences would help us in predicting with more accuracy when the EFL learners are expected commit errors. Third, this study attempts to unveil the factors influencing the acquisition of L2. Therefore, it is hoped that the findings of this study would help in understanding the role of one of these factors namely, transfer from L1, and as a result minimizing its negative effects. Reducing the influence of negative transfer would lead to a better acquisition of English prepositions because the quantity of errors will diminish.

Fourth, the present study identifies the most difficult usage of English prepositions for the Jordanian EFL learners. To be more specific, the usage that shows the highest proportion of errors would be the most difficult for the respondents. The importance of identifying the most problematic usage can be justified by these two points: First, it helps in directing the attention of the EFL instructors to this problematic use in order to find remedial solutions for the benefits of the EFL learners. Second, it helps in raising the awareness of the EFL learners to such problematic use in order to secure that more efforts are made to acquire it properly. Previous studies (Al-Qudah, 2013; Tahaineh, 2010) that were conducted on the acquisition of English prepositions among Jordanian EFL learners examined the most difficult prepositions (e.g. at, on, of) in isolation of the usage in which they occur (temporal, spatial). However, determining the most difficult use of English prepositions would be more beneficial than determining the most difficult preposition. It is hoped that by identifying the most difficult usage of English prepositions, language instructors and curriculum designers would understand the problems that Jordanian EFL learners confront when acquiring preposition.
Fifth, this study investigated the acquisition of pied-piping and preposition stranding in interrogatives. It is worth noting that, both Arabic and English language allow pied piping in interrogative clauses whereas, preposition stranding is prohibited in Arabic but permitted in English (Makvandi & Gorjian, 2014). It was noted that there are only few studies in the Arab world that have addressed the issue of preposition stranding and pied piping among learners whose native language is Arabic (Algryani, 2010; Makvandi & Gorjian, 2014). Investigating the acquisition of these two language structures would help in understanding, which language structure is acquired earlier than another; preposition stranding or pied piping.

Sixth, the present study takes into account two important factors interacting with L1 transfer, namely: L2 proficiency level and gender. The relationship between L2 proficiency level and L1 transfer is still inconclusive. Some researchers argued that, as L2 proficiency increases, transfer from L1 decreases (Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013). Others contended that, L1 transfer either remains stable across different proficiency levels or takes place mainly at the advanced stages of L2 acquisition (Bhardwaj, 1986; Hadadi, Goodarz & Abbasi, 2014; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). This study builds on the previous studies done on this area and hopes to provide further insight into the correlation between L1 transfer and L2 proficiency. Understanding the correlation between L1 transfer and L2 proficiency level would help knowing when does transfer from L1 start and ascertaining if it lasts with the L2 learners. Also, it is hoped that, the findings of this study enhances our understanding of the relationship between gender and transfer from L1, since such relationship is still inconclusive. Examining gender differences would provide access in gaining more knowledge on the role of gender as an external factor in the acquisition of English prepositions.
1.6 Limitations of the study

Generalization of findings of the present study is limited to Jordanian EFL learners. Accordingly, the results may not be generalized to the EFL learners from other Arab nationalities. The study is limited to the role of transfer from Arabic language in the acquisition of English prepositions in written English while spoken English is excluded. Moreover, the study restricts the investigation to the most frequent simple English prepositions, while complex prepositions are not included because such structures are not deemed as prepositions in Arabic language. In Arabic language, all prepositions are simple i.e. consisting of one word; those made up of more than one word are not prepositions, but treated as compound words (Al-Marrani, 2009).

1.7 Definition of terms

The following terms are used throughout the present study

**Classical Arabic:** The language of the holy Quran. It could be viewed as the language of pre-Islamic poets. This language is fully vowelized and is rarely used in today’s everyday writing (Belkredim & Sebai, 2009, p. 1).

**Colloquial Arabic:** Consists of the dialects of different Arab countries. They are used for everyday oral communication by the people of different areas. There are no written transcripts for such dialects (Belkredim & Sebai, 2009, p. 1).

**Developmental errors:** Errors that their normal occurrences in the course of learning either a first or a second language (Odlin, 1989, p. 166).
**First language transfer**: The influence resulting from the similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired (Odlin, 1989, p. 27).

**Intralingual errors**: Errors that reflect the general characteristic of rule learning such as faulty generalization, incomplete application of rules and failure to learn conditions under which rules apply.

**Interlanguage**: The language produced by a non-native speaker of a language (i.e. a learner’s output). Refers to the systematic knowledge underlying learner’s production (Gass & Selinker, 2008).

**Modern Standard Arabic**: The language of today’s Arabic newspapers, magazines, periodicals, letters and modern writers. It is also used as a medium of oral communication in formal speeches and on television and radio broadcasts (Belkredim & Sebai, 2009, p. 1)

**Negative transfer**: The use of the first language (or other languages known) in a second language context resulting in a non-target-like second language form (Gass & Selinker, 2001, p. 457).

**Positive transfer**: The use of the first language (or other languages known) in a second language context when the resulting second language form is correct (Gass & Selinker, 2001, p. 457).

**Prepositions**: A preposition expresses a relation between two entities, one being that represented by the prepositional complement, the other by another part of the sentence (Quirk, 1985).
**Preposition pied-piping:** A term proposed by the linguist John R. Ross to describe the construction, where the whole prepositional phrase (PP) ‘a preposition and its complement’ moves to the front part of the sentence.

**Preposition stranding:** The syntactic phenomenon whereby a preposition is left in a deferred, i.e. stranded, position at or near the end of a clause without any immediately following object (Denison, 1998).

1.8 Outline of thesis

The thesis is divided into five chapters.

   Chapter One: This chapter includes the following sections; Introduction, background of the study, statement of the problem, objectives of the study, research questions, significance of the study, limitations of the study, definition of terms and outline of thesis.

   Chapter Two: This chapter is comprised of five sections. Section one introduces the definitions and types of transfer from native language. Section two outlines the two language approaches that form the theoretical framework of this study; this includes Contrastive Analysis (CA) and Error Analysis (EA). Section three reviews some factors affecting language transfer; this includes L2 proficiency level and gender. Section four is divided into two sub-sections: The first sub-section is a review of studies that were conducted on the acquisition of English prepositions among Arab EFL learners. The second sub-section introduces a short review of the occurrence of preposition stranding and pied piping in English and Arabic with some illustrative examples. This sub-section also discusses critically the literature on the acquisition of preposition stranding and pied piping. Section five is the summary of the chapter.
Chapter Three: Describes the design and methodology of the study. This includes; introduction, design of the study, population of the study, sample size, sampling procedures, instrumentation, scoring method, the selection of prepositions, generalization of findings, data collection procedures, data analysis and summary.

Chapter Four: Findings of the study: The chapter discusses the findings of the study with reference to the six research questions raised in the present study. Also the chapter includes summary of the findings.

Chapter Five: This includes discussion of the results, contributions of the present study to the field of second language acquisition, implications of the study, limitations of the current study and suggestions for future research. The chapter concludes with a summary.
CHAPTER TWO
LITERATURE REVIEW

2. Introduction

This chapter is divided into five sections. Section one presents the definition and types of language transfer. Section two introduces the two language approaches that constitute the theoretical framework of this study; this includes Contrastive Analysis (CA) and Error Analysis (EA). Section three discusses some factors affecting the concept of language transfer; in this section the focus is placed on the factors that are examined in this study, namely; L2 proficiency level and gender. Section four is divided into two sub-sections: The first sub-section is a review of studies that were conducted on the acquisition of English prepositions among Arab EFL learners. This sub-section also introduces a cross-linguistic comparison between prepositions in English and Arabic where the forms, functions and usages of prepositions in each language are presented. The second sub-section introduces a short review of the occurrence of preposition stranding and pied piping in English and Arabic with some illustrative examples. This sub-section also discusses critically the literature on the acquisition of preposition stranding and pied piping. Section five is the summary of the chapter.

2.1 Definition and types of language transfer

As a result of lack of agreement among linguists on the extent to which language transfer affects L2 acquisition, there is no general consensus on the terms and definitions used to describe language transfer. Various terms were presented by linguists in referring to first language transfer such as language mixing (e.g., Selinker, 1972; Kellerman, 1983), language transfer (e.g., Lado, 1957; Odlin, 1989), cross-linguistic interference; (e.g., Ringbom, 1987) and the role of the mother tongue
It is noteworthy that throughout the present study the term language transfer is used.

Linguists have advanced various definitions of the phenomenon of language transfer. One of the earliest attempts to define language transfer was by (Lado, 1957) who argued that language transfer is the influence resulting from the old habits of mother tongue of L2 learners. Selinker, Swan and Dumas, (1975.P, 134) stated that language transfer is “The application of native language rules to target language forms”. Krashen, (1982.P, 29) referred to language transfer as “Falling back on first language knowledge”. Moreover, Schachter, (1992.P, 32) presented one more definition of language transfer as “A constraint on the learner’s hypothesis testing process”. Istvan, (2000.P, 8) described language transfer as “any kind of movement or influence of concepts, knowledge, skills, or linguistic elements (structures, forms) in either direction between the L1 and the subsequent languages”. One of the recent definitions was presented by Gass and Selinker, (2008.P, 519) who contend that language transfer is “the use of the first language (or other languages known) in a second language context”. It is apparent that language transfer was defined in different ways in accordance with viewpoint of each researcher. Odlin, (1989) attributed the lack of agreement among linguists on a unified definition of language transfer to the long existence of this phenomenon.

Odlin, (1989) elaborated on the numerous definitions of language transfer given by the aforesaid linguists and presented critiques of each definition. First, Odlin criticized the behaviorist position that considered transfer as a result of habit formation, stating that “Transfer is not simply a consequence of habit formation”. He added that the behaviorist view of language transfer is irrelevant to L1 influence in the sense that the conception of language transfer in behaviorism theory involves extinction of L1 habits, whereas in reality L2 acquisition does not lead to alteration of L1 forms. Second, Odlin rejected employing the term interference in referring to language transfer because
interference means no more than negative transfer, which stems from differences between L1 and L2, causing difficulties to L2 learners. However, language transfer can be positive and facilitate learning L2 when there are correspondences between the forms of L1 and L2. Third, Odlin objected to defining language transfer as “Falling back on the native language”. This definition was proposed by Krashen,(1983) who described language transfer as, in Krashen’s words “Transfer … can still be regarded as padding, or the result of falling back on the old knowledge, the L1 rules when new Knowledge …is lacking. Its cause may be having to talk before ready, before necessary rule has been acquired”. Odlin argued that such definition of transfer is problematic since it leaves out the advantages that some L2 learners may have over others (e.g., Spanish speakers of English acquire English earlier than their Arab counterparts due similarities between Spanish and English). Krashen regarded language transfer as production strategy; however transfer would play facilitative role in reading and listening comprehension as well. Fourth, “transfer is not always native language influence”. Because in the event that a person speaks three languages, the knowledge of the two previously acquired languages will affect the third, therefore transfer does not always stem from native language effect.

After providing a detailed description of some previous definitions, Odlin,(1989.P,27) defined language transfer as “The influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired”. It could be said that the lack of agreement on a comprehensive definition of language transfer is part of the controversy on the actual role that L1 plays in the acquisition of L2. Having a satisfactory definition of language transfer is unattainable unless we understand the extent to which language transfer affecting L2 and its relationship to other factors constraining L2 acquisition such as the developmental factor.
According to Odlin, (1989, p. 12) there are two main types of language transfer; borrowing transfer and substratum transfer. Borrowing transfer means “the influence a second language has on a previously acquired language”. Whereas, substratum transfer is the kind of language transfer examined by the majority of research in the field of SLA; this kind of transfer necessitates the effect of learner’s mother tongue on the acquisition of L2. Substratum transfer can be categorized into two main types namely; positive and negative transfer. It is believed that positive transfer arises from cross-linguistic similarities between the forms of L1 and L2. Positive transfer plays a facilitative role in L2 acquisition. More precisely, similarities between L1 and L2 vocabulary minimizes the time required to improve L2 reading comprehension skills. In a similar vein, correspondences between L1 and L2 writing systems, phonological systems and grammars can give L2 speakers a good start in the acquisition of L2 structures. Furthermore, negative transfer results from difference between the norms of L1 and L2. Negative transfer is readily identified and equated with the occurrence of errors. This particular study took into consideration the two types of language transfer; positive and negative transfer. The instruments used to collect data from the respondents included instances where English and Arabic prepositions act differently as well as instances of similarities between the two prepositional systems.

Having presented some definitions of the concept of language transfer and reviewing its types, it is fitting to introduce language approaches that are associated with language transfer and constituting the theoretical framework of this study.
2. 2. Theoretical framework of the study

This section presents two second language acquisition approaches tied to language transfer, namely Contrastive Analysis (CA) and Error Analysis (EA). These two approaches are the theoretical framework of this particular study.

The history of language transfer is highly connected to different theoretical views in second language acquisition (SLA). The early thinking about language transfer began with the work of the two linguists, Charles Fries and Robert Lado during the 1940s and 1950s of the last century within the framework of behaviorism theory. The notion of language transfer occupied a central position in the behaviorist view of language acquisition because language transfer was deemed as the main source of L2 learners’ errors. In a bid to predict the occurrence of these errors, behaviorism employed Contrastive Analysis (CA). According to Gass and Selinker (2008) CA is a manner of comparing two languages in order to identify the errors for achieving the ultimate goal of differentiating between what one needs to acquire and what does not need to acquire in SLA situation.

The underlying assumptions of CA were derived mainly from behaviorism theory. More precisely, CA claims that, language acquisition is a matter of habit formation and native language transfer is the main cause of errors made by L2 speakers. This is in line with Fries (1957 cited in Gass & Selinker, 2008, p. 95) who stated that “The basic problems arise not out of any essential difficulty in the features of the new language themselves but primarily out of the special set created by the first language habits”. CA holds that one can account for errors made by L2 learners by considering the differences between two languages in contrast, thus, the greater differences, the greater errors possibly to take place (Gass & Selinker, 2008). A corollary
to the previous point, CA believes that what one needs to acquire in L2 situation is the differences, while similarities can be ignored because no new knowledge is expected to take place.

Within the framework of CA two versions need to be differentiated. CA a priori, which is also termed as the predictive or strong version, and CA a posteriori, which is called the explanatory or weak version. In the present study the researcher used the terms the weak and the strong versions since they are the most common terminologies in SL research (Torrijos, 2009). According to Schachter and Rutherford (1979) the strong version of CA is a step by step analysis of the similarities and differences of the morphological, phonological, syntactic, and other subsystems of two given languages. Moreover, making such comparison between two languages aims at predicting the difficulties that L2 speakers encounter. Proponents of the strong version concede that, the prediction of the difficulties does not explain all problems second language speakers encounter due to the fact that, some problems result from other factors such as motivation and previous teaching. With regard to the weak version as described by Wardhaugh (1970), the focus moved from the predictive power of probable errors arising from L1-L2 differences to explaining the sources of errors made by L2 speakers. Brown (1987) stated that, the main emphasis of the weak version is not on prediction of difficulties that result from differences between two languages in contrast, but rather on explaining sources of these errors. The weak version was developed later into Error Analysis (EA).

CA was employed by many researchers who investigated the impact of language transfer on the acquisition of L2 structures. Liao (2010) investigated the effect of language transfer on the acquisition of phraseology by Chinese speakers of English. The sample of the study contained 265 EFL college pupils in China. The participants were divided into three groups according to
their proficiency levels; advanced, high intermediate and intermediate. The instruments utilized in the study comprised multiple choice test and grammaticality judgment task. In her study Liao, employed the weak version of CA approach as the theoretical framework of the study. The reasoning behind using the weak version of CA is to analyze the errors made by the participants as they acquire English phraseology and then providing adequate account for the sources of these errors based on L1-L2 differences. The findings of the study revealed that, language transfer affected the competence and use of collocations. The study further showed that, there was a significant correlation between the participants’ collocational competence and their proficiency level. Another study employed the means of CA was implemented by Ali and Bin Abidin, (2011) who conducted a comprehensive contrastive analysis between the sub-systems of Arabic and Malay. Contrastive Analysis approach was utilized in this study in order to describe the structures of the two languages. The researchers started out with comparing the syntactic system in the two languages. This included word-order, noun phrase, passive voice, object, and sentence. Besides, structures such as the subject of nominal sentence and verbal sentence were described in Arabic and Malay. The study arrived at the conclusion that, there are some similarities between the two syntactic systems, particularly the structures related to nominal sentences and conditional sentence. In contrast, the differences between the two languages were found mainly in the subject noun phrase. One more study utilized Contrastive Analysis approach was conducted by Bilal, et al (2013) who investigated the errors committed by Pakistani school students when acquiring English as L2. The sample of the study was gathered from 100 written compositions by Pakistani EFL learners studying at several private and public schools in Pakistan. The researchers employed the means of Contrastive Analysis for the purpose of describing the prepositions in both English and Urdu (native language in Pakistan). The results
of the study revealed that, transfer from native language (Urdu) is the major source of errors made by the participants, scoring 62% of the total percentage of errors, while the rest of errors were committed due to intralingual interference and communication strategies, scoring respectively 34% and 4%.

It is worth noting that, despite the widespread of CA with its two versions during the 1960s of the last century, it was challenged seriously for some shortcomings. According to Odlin (1989) it is clear that many difficulties that L2 learners encounter do not always stem from differences between two languages in contrast, and many of the errors caused by L1-L2 differences are not always predicted by the means of CA. One more criticism directed against the validity of CA is that, many of the errors committed by L2 learners are not always traceable to L1 transfer. For example, Spanish and English both have the forms of the verb be, and it was noted by some researchers (Peck, 1978; Schumann, 1979) that Spanish learners of English keep omitting the forms of the verb be in a sentence like *that very simple instead of saying that is very simple in spite of the existence of such form in their mother tongue. These errors cannot be attributed to L1 transfer, but rather they are developmental or intralingual errors.

As reported by Gass and Silenker (2008) CA failed to find satisfactory answer to such question as, why L1 transfer takes place in one case, and does not occur in another? For instance, a study done by Duskova (1984) on Czech learners of English and Russian, showed that Czech learners of English did not fall back on their L1 when acquiring bound morpheme, whereas the those acquiring Russian did, which lent support to the view that transfer from L1 takes place in one case but not in another. Besides, CA is unable to find satisfactory answer to another question such as, why L1 transfer occurs in one language and disappears in another?. For the sake of clarity, Zoble (1980b) conducted a study on English learners of French and French
speakers of English. The findings of his study revealed that, the French learners did not transfer French word order when acquiring English, whereas the English learners of French did. More precisely, in French the object pronoun comes prior to the verb (*I them see) whereas, in English the object pronoun appears after the verb (I see them). In this case Zoble noted that, the French speakers did not use the object pronoun in advance of the verb when acquiring English, consequently they did not follow their NL word order, whereas the exact opposite happened with English learners of French, who never put the object pronoun prior to the verb. As a result they transferred English word order into French which supported the position that transfer from L1 occurs in one language and does not occur in another. Gass and Selinker (2008) commented on the criticisms directed against CA saying that, the drawbacks of CA do not mean excluding the role of L1 transfer in L2 acquisition, but rather what can be said is that, transfer from L1 is not the only factor at play. There are other factors along with L1 transfer influencing L2 acquisition, and the role of L1 is not as simple as suggested by early CA.

Despite the critiques of CA approach with its two versions, researchers interest in the role of L1 transfer continue in employing the contrastive approach since any study of language transfer needs some kinds of contrastive analyses (Ellis, 1994). This is in line with Odlin (1989, p.28) who contended that, “the study of transfer depends greatly on the systematic comparisons of languages provided by contrastive analyses”. Sajavaara (1981) argued that, CA is under attack because it is too simplistic and restrictive. Basically, CA rested on the idea that the predictions of L2 errors can be achieved only by comparing similarities and differences of L1 and L2 forms. Sajavaara argued that the solution lies not in a complete rejection of CA, but rather in revising the method by which the comparison is made between two distinct languages. In a bid to compensate for the shortcomings of CA and to provide more acceptable accounts for some issues
relevant to L2 acquisition, CA underwent three major developments which is known as modified CA.

The modified CA holds that, L1 transfer is a cognitive process rather than a consequence of mere habit formation. According to Ellis (1985) the modified version of CA accounts for L1 transfer in three respects; 1- avoidance, 2- degree of similarity and 3- multi-factor phenomenon.

1- Avoidance: Traditional CA equated the difficulty that L2 speakers encounter with the occurrence of errors; however there are cases where difficulty results in no errors. This is manifested by employing avoidance strategy. Avoidance is firstly proposed by Schechter (1974) who examined the use of relative clauses by EFL learners from various L1 backgrounds (Arabic, Persian, Chinese and Japanese). She came to the conclusion that, due to transfer from L1, Chinese and Japanese L2 learners use fewer relative clauses than their Arab and Persian counterparts because both Arabic and Persian have similar relative clauses to those found in English whereas, relative clauses are absent from Japanese and Chinese. Such transfer is not manifested in errors but in utilizing avoidance strategy. Schechter’s study lent support to L1 transfer hypothesis and proposed that despite the fact that CA failed to predict L2 learner’s production of errors but it accounted for avoidance strategy and comprehension errors. This is also provided evidence that, many of the criticisms advanced against CA were not fool-proof.

2- Degree of similarity: Traditional CA believes that, difficulties in the acquisition of L2 result from transfer of the old habits of L1. This is associated with the distance between L1 and L2 in which the larger differences between two languages, the more
difficulties and errors are expected to occur. Whereas, similarities play a facilitative role in acquiring L2, however, this is not always the case. Errors seem to take place when there is a degree of similarities between L1 and L2. Lee (1968) stated that, he did not experience much transfer from his NL (English) when acquiring Chinese because the two languages are too different. Jackson (1981) made a cross-linguistic comparison between Punjabi and English and found that, errors disappeared when there are differences between the structures of the two languages; however, when there are similarities errors appeared more. This is in line with James (1980) who pointed out that, Skaggs and Robinson’s hypothesis holds that negative transfer from L1 is more evident when there are similarities between L1 and L2.

3- Multi-factor phenomenon. This is considered as the most important development in the position of CA because L1 transfer is no longer seen as the only factor accounts for L2 learners’ errors, but rather it interplays with other factors in a complicated manner. Hatch (1983a) investigated the extent to which naturalness factors (e.g. salience of certain L2 features) and language transfer interact in determining L2 structures. He found that at the level of phonology and morphology both L1 transfer and naturalness factor are at play but at the level of syntax and discourse the only determinant factor is naturalness. In an attempt to account for the errors of L2 speakers, Cazden et al. (1975) conducted a study on the acquisition of negation by Spanish EFL learners. They observed that all Spanish speakers followed the same developmental sequence when acquiring English negation which comprises ‘no+ V’ pattern. At first glance this seems as an instance of positive transfer from
Spanish because the negation system of Spanish and English is the same. However, it was also observed that, such pattern of negation ‘no+V’ was followed by both native speakers of English and other L2 learners whose L1s do not have this pattern. Therefore, it is most likely that the developmental factor is the appropriate account for the acquisition of negation by Spanish EFL learners. Cazden et al also observed that, this pattern of negation lasted with Spanish learners of English longer than all other learners whose L1s lack such pattern due to positive transfer from Spanish, which supported multi-factor phenomenon. The two above mentioned studies are in agreement with the premise that, language transfer and the developmental factor work in tandem in shaping the acquisition of L2.

As consequence of the skepticism directed against CA which regards L1 transfer as the major source of errors made by L2 learners, Error Analysis (EA) was brought to light. EA adopts a different methodological view form CA, in that it elevates the status of errors from undesirability to a mean by which speakers proceed with the process of L2 acquisition (Ellis, 1985). One of the forerunners of EA is Corder (1967) who stated that, the significance of learners errors lies in three facts. First, errors are important for the teacher in that they inform him if he follows a systematic analysis when presenting the curriculum to be learned; also errors tell the teacher about L2 learners’ progress at the acquisition process. Second, errors provide researchers with answers to questions such as how do speakers acquire L2 and what methods do they use when acquiring their second language. Third, errors are significant for the L2 speakers themselves, because they can be considered as a tool by which the speakers acquire the language. According to Gass and selinker (2008) EA classifies errors according to their source into two major types; interlingual and intralingual errors. Interlingual errors are the types of errors which
caused by negative transfer from L1, whereas intralingual errors result from difficulty in the target language itself, not from L1 transfer. Thus, it is apparent that EA provides broader choices of sources of errors than CA does. This is in line with a statement made by Brown (1987) who claimed that “EA became distinguished from CA by its examination of errors attributable to all possible sources, not just those which result from negative transfer of the native language”.

According to Corder (1974 as cited in Ellis, 1994, p.48) there are five steps that should be followed in conducting EA research.

1- Collection of a sample of learner language: This simply means specifying the sample that will be used in the study and how to collect the required sample. Ellis (1994) mentioned three types of EA on the basis of sample size, namely, A- Massive sample: This requires obtaining the data from numerous samples representing a massive number of L2 learners for the purpose of collecting inclusive list of errors to represent the entire population of the study. B- Specific sample: Contains one sample collected from restricted number of L2 learners. C - Incidental sample: This type of sample collects the required data only from one L2 speaker. For the purpose of the present study, a massive sample was used in which the participants were selected from 10 universities in order to prepare an inclusive list of errors representing the whole population.

2- Identification of errors: for the purpose of identifying an error, some respects should be taken into account. First, specifying the variety of language that should be used as a norm in the study where any deviation from this norm is counted as an error. More precisely, Studies that attempt to investigate speakers’ written production should select the standard written dialect as a source for collecting the data not the oral dialect. In the present study,
the standard written English is counted as the norm, since the instruments were designed
to measure written production of the respondents but not spoken production. In other
words, any deviation from the standard written English was counted as an error or ill-
formed utterance.

Second, making a distinction between an error and a mistake. According to Corder
(1967) errors are defined as deviances that arise from the lack of knowledge or incomplete
acquisition of target language. As errors are attributed to lack of knowledge of L2, they seem to
be systematic and not self correctable because the L2 learner does not know what is the correct
form, whereas mistakes are defined as performance deficiencies that take place as a result of lack
of attention, memory limitation, fatigue and carelessness. Mistakes do not seem to be systematic
but self correctable when the attention is paid. As for this particular study, language deficiencies
produced by the participants were counted as errors because the participants were given enough
time and they were not under any type of pressure.

Ellis (1997) proposed two methods to distinguish between errors and mistakes. First,
testing learner’s use of language structures, more specifically, if the learner occasionally uses the
correct form and other times uses the wrong form then this is a mistake. But, if he always uses
the wrong form, then in such case this is an error. Second, to ask the learner to correct himself, if
he is able to make the required correction then the deviation is a mistake, whereas if he did not
manage to correct his utterances then the deviation is an error.

3- Description of errors: This step involves making a comparison between the utterances
produced by L2 learners and the use of the same utterances in the target language. This step
involves classifying errors into different categories. According to Corder (1973) errors
committed by L2 learners fall into four categories. 1- Omission errors: absence of a necessary item, 2- Addition errors: presence of unnecessary item, 3-Substitution errors: choosing inappropriate item and 4- Misordering errors: This type of errors involves incorrect placement of items. In the present study, this classification was utilized for both language transfer and intralingual errors. In other words, errors in the use of prepositions were categorized into three types; omission, addition and substitution. However, misordering errors were excluded from the taxonomy of errors. This is activated by the fact that, the nature of the fill-in-the-blank used in this study does not require the respondents to compose sentences or write full paragraphs, but rather the respondents were instructed to write only one item in each sentence, which excludes the occurrence of misordering errors.

4-Explanation of errors: means determining the source of errors or presenting explanation of why did an error occur. According to the Ritchards (1974) two main sources of errors can be distinguished.

A- Interlingual errors: these errors result from negative transfer from mother tongue of L2 learners.

B- Intralingual and developmental errors: This type of errors stem from faulty usage or incomplete acquisition of L2 rather than L1 influence. In this study, the researcher classified errors according to their sources into two categories; transfer errors and intralingual errors. Intralingual errors are further subdivided into four types. Richard (1971) described the following types of intralingual errors.

A- Overgeneralization errors: these errors occur when L2 learners produce incorrect structures based on other structures in L2.
B- Ignorance of rule restrictions: this type of errors takes place when L2 learners apply inappropriate rules to the context.

C- Incomplete application of the rules: means failure to produce complete structures.

D- False concepts hypothesized: means failure to fully understand the distinction in target language.

In the present study, the foresaid classification was taken into account. More precisely, all intralingual errors were categorized according to these four types.

5-Evaluation of errors: this involves taking into account the impact of errors on the person addressed. This impact can be measured in terms of comprehension of the meaning conveyed by the learner or in terms of effective response to the errors on the part of addressee. Step five was not included in this study because it is a bit different from the previously mentioned steps and involves different measurement instruments. According to Ellis, (1994, p. 48) “many studies do not include step 5 and, in fact, the evaluation of learner errors has generally been handled as a separate issue, with its own methods of enquiry”.

Many researchers such as Abu Naba'h (2011), Jayasundara and Premarathna, (2011), Yousefi, Soori and Janfaza, (2014) utilized the means of EA as the theoretical framework for their studies when investigating the influences resulting from L1 transfer on the acquisition of L2 structures. Yousefi, Soori and Janfaza, (2014) examined the most frequent errors in the use of English prepositions by Iranian EFL learners. In a bid to collect the data for this study, the researchers used a 37 item multiple choice test. A total of 35 Iranian EFL learners took part in the study. The researchers employed the means of Error Analysis to determine the sources of errors made by the participants as they acquire English prepositions. Following EA procedures,
participants’ errors were classified into selection, addition, omission and then these errors were grouped into two classes according to their causes; language transfer errors and intralingual errors. The results of the study revealed that, most of prepositional errors were caused by transfer from Persian rather than intralingual interference. One more study utilized Error Analysis was conducted by Abu Naba'h, (2011) who examined the lexical errors made by Jordanian English language teachers. A total of 50 English teachers partook in this study. Those teachers registered in the upgrading program at Hashemite University. The data needed for the study were collected from the papers of the final examinations of the participants in question. Following Error Analysis procedures, the researcher firstly, identified the lexical errors made by the participants, secondly classified these errors and thirdly explained the sources of errors. The results of the study showed that, language transfer errors constituted 85%, while intralingual errors accounted for 15%.

Another study employed Error Analysis was implemented by Jayasundara and Premarathna, (2011) who examined errors committed in writing and speaking by Sri lankan EFL learners. The sample of the study was comprised of 55 undergraduate students. The researchers used questionnaire, interviews, written compositions and oral test to gather the data for the study. Following the means of Error Analysis proposed by Corder, (1974), errors made by the participants were identified and then classified into eight categories. The researchers concluded that, grammatical errors are the most difficult for the participants, followed by orthographic errors.

As any other language acquisition approach, EA is not without shortcomings. Ellis (1994) summarized the criticism of EA in three main points. First, EA was attacked for focusing mainly on errors and leaving out the non-errors. He argued that, to get a complete picture about
speaker’s linguistic performance, one needs to know not just what L2 speakers do wrongly but also what they do truly. Second, the majority of studies implemented within the framework of EA are cross-sectional in nature, in the sense that little attention is paid by researchers at breaking speakers’ errors into categories showing the stages of development of language acquisition. In other words, EA does not elaborate on how L2 speakers develop their language over years. Third, EA failed to account for avoidance phenomenon. This criticism came from Schachter (1974) who implemented a study on the influence of avoidance on the acquisition of English relative clauses by speakers whose first languages are Chinese, Japanese, Persian, and Arabic. The results showed that, the number of relative clauses produced by Chinese and Japanese students was less than those produced by Arab and Persian students. Schachter concluded that EA does not reveal avoidance of relative clauses by Chinese and Japanese students. Thus, the absence of errors does not mean that those students are native-like, but rather they resorted to avoidance strategy because relative clauses do not exist in their NLs.

Despite the serious drawbacks of EA approach, it is still in use and employed by many researchers to analyze the errors committed by L2 speakers. Ellis (1994) commented on the role of EA in SLA saying that, EA is deemed as the first serious attempt to examine learner language in order to provide adequate account for how L2 is acquired. He added that EA continues to be used, but now it is practiced to examine specific research questions instead of providing comprehensive explanation for L2 speakers’ errors.

Having discussed some issues relevant to CA and EA, it is obvious that the two approaches are not conflicting ones, but rather completing each other. While CA obviously counts L1 transfer as the major source of L2 learners’ errors, EA admits the role of L1 transfer and extend examination to other possible sources that accompany language transfer. This is in
line with James (1980) who stated that CA and EA are often regarded as being complementary. Therefore, in order to gain in-depth understanding of the errors committed by L2 speakers, both CA and EA should be utilized. This is in support with Ellis (1994, P. 308) who argued that “contrastive analysis needed to be used hand in hand with error analysis” and Schachter (1974) who called for a combination of CA a priori, EA and comprehension testing in order to gain more insight into the acquisition process of L2.

Based on what has been mentioned above, CA which holds a cognitive view in studying language transfer along with EA were employed as the theoretical framework of the present study. The justification for using the two approaches together is that, CA was utilized in order to describe the two prepositional systems of English and Arabic. The current study presented an extensive cross-linguistic comparison in order to show the similarities and differences among prepositions in English and Arabic. While, EA was adopted in order to analyze the prepositional errors and to determine their sources based on L1-L2 differences. Utilizing the means of a compound approach was adopted by many researchers such as Chen (1999), Castro (2013) and Tran (2010) who studied the role of language transfer in the acquisition of L2. Castro (2013) investigated the acquisition of English prepositions by L2 learners whose mother tongue is Filipino. The researcher employed both CA and EA as the theoretical framework of her study. CA was used to describe the two prepositional systems of English and Filipino and EA employed to classify and determine the sources of prepositional errors made by the participants.

In sum, language transfer has unstable history in which the conceptualization of this notion is different from one approach to another. Obviously, CA which originated from the behaviorist view regards language acquisition as a consequence of habit formation process and L2 learners’ errors result mainly from transferring the old habits of L1 into L2. Later on, CA
was criticized heavily for these beliefs and as a reaction to these serious critiques, it underwent some changes considered as a turning point in the history of this approach. More precisely, CA abandoned its past position concerning the role of language transfer, counting it one of many factors influencing the acquisition L2, but not the only factor at work. This position constituted the most important change in the position of CA. Furthermore, CA is no longer deems language transfer as a consequence of habit formation process, but rather transfer is seen as a creative process based on thinking and reasoning.

These changes in the position of CA is regarded as the new trend in the study of second language acquisition. This is in agreement with Gass and Selinker (2008, p. 135) who argued that, “adopting a cognitive view and incorporating a strong role for the NL is the prevailing view in current SLA research”. Whereas, EA takes into consideration the role of intralingual transfer alongside L1 transfer as the chief sources of errors made by L2 learners. EA attempts to demonstrate that, L2 learners’ errors do not arise only as a result of transfer from L1 but rather, there are other universal processes interact with language transfer in a complex manner.

In second language research, the phenomenon of language transfer is associated with various external variables. These variables are working in a close connection with language transfer. The next section reviews the two variables that were examined in this study; L2 proficiency level and gender.

2.3. Factors affecting language transfer

Jarvis (2000) mentioned a number of factors that influence the extent to which L1 structures transfer into L2. The factors Jarvis mentioned are; age, personality, motivation and language attitude, social, educational and cultural background, language background (all
previous L1s and L2s), type and amount of target language exposure, target language proficiency, language distance between the L1 and the target language, task type and area of language use and prototypicality and markedness of the language feature. Maria (2010) pointed out to some factors that have influences on lexical transfer such as L2 proficiency level, L1 background, motivation and gender. According to Jarvis and Pavlenko (2008) the purposes of the study, research questions and viability of data collection determine which external factors should be taken into consideration and which should be excluded. They added that, in the event that all these factors related to the purpose of the study, the researcher should prioritize the ones that were found in the literature to interplay with language transfer in particular language subsystem.

Within the context of the present study, two factors interacting with language transfer were investigated namely; L2 proficiency level and gender. Based on literature, the relationship between language transfer, L2 proficiency and gender is still a matter of controversy; therefore examining these two factors would help in getting more insight into the extent to which language transfer, L2 proficiency level and gender interacting when acquiring L2.

Examining L2 proficiency level as an external factor in this study can be justified by saying that, the relationship between language transfer and L2 proficiency level is a disputed issue, meaning that no general consensus has been reached among linguists upon this relationship. Thus, L2 proficiency level was investigated in this study with the aim of gaining a sufficient knowledge on the interaction between L2 proficiency level and L1 transfer. Acquiring a sufficient knowledge can be deemed as a small step on the path to settle the argument among linguists over this issue. As will be displayed in the forthcoming part of this section, there are
two conflicting views on the relationship between language transfer and English proficiency level.

Gender factor was researched in this particular study in order to acquire more insight into the correlation between language transfer and gender, since there is disagreement among linguists on the extent to which language transfer and gender interplaying together. This section reviews extensively the conflicting findings of studies that were carried out on the interaction between language transfer and gender. The discussion about the external factors examined in the present study starts with L2 proficiency level and concludes with gender factor.

2.3.1. Language proficiency level

It is believed that there is a close relationship between language transfer and L2 proficiency level in the sense that they work together in shaping the language of L2 learners. Kellerman (1985) stated that language transfer interplays with L2 proficiency level in forming what is transferable and what is not, beyond similarities and differences between L1 and L2. Odlin (1989) pointed out that, there is an evidence supports the existence of a relationship between language transfer and L2 proficiency. To date, no consensus has been reached over such relationship. Some researchers argues that, the influence of L1 transfer decreases with increase in the level of L2 proficiency (e.g. Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013). Whereas others declare that, L1 transfer either appears at advanced L2 proficiency level more than low level or remains stable across different L2 proficiency levels (e.g. Bhardwaj 1986; Hadadi, Goodarz & Abbasi, 2014; Mohammad, 2011; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). It is noteworthy that, the term L2 proficiency level is used in this study in referring to writing L2 proficiency.
Bu, (2012) conducted a study on the correlation between native language pragmatic transfer and L2 proficiency level. Forty participants took part in this study. The participants were classified into four groups as follows; 1- ten low level Chinese EFL learners, 2- ten high level Chinese EFL learners, 3- ten Chinese native learners and 4- ten English native learners. The data for the study were collected by using discourse completion test questionnaire. The results of the study showed that, transfer from L1 (Chinese) mitigated as L2 proficiency level increased. In other words, advanced Chinese EFL learners were less likely to rely on L1 than their low level counterparts. In line with Bu’s findings, Corder (1978) argued that, L2 acquisition is a restructuring continuum process. This view hypothesizes that, L2 learners at early stages of acquisition rely on their L1s more than advanced learners. Thus, the starting point for L2 acquisition is L1, which is gradually substituted for L2 as the acquisition process advances. Usually, not the forms of L2 that replace the forms of L1, but rather the strategies that are used by L2 learners replace those of L1. Such utilized strategies are presented in a continuum of strategies employed by native speakers of two languages in contrast.

Erarslan and Hol (2014) implemented a study on the role of L1 transfer in the acquisition of English vocabulary, tense and prepositions. A total of 323 Turkish learners of English participated in the study. The participants were grouped into three English proficiency levels; elementary, pre-intermediate and intermediate. The data required for the study were collected by means of translation task and translation test. The results of the study relevant to the relationship between language transfer and English proficiency level displayed that, Turkish L2 learners at elementary stage committed L1 transfer errors more than advanced learners. The results of this study are consistent with the findings of a study was carried out by Phoocharoensil, (2013) who examined the influence of L1 on the acquisition of English collocations by Thai EFL learners.
a bid to measure the production of collocations by the participants, the researcher utilized essay writing test. The participants in the study were comprised of 90 Thai EFL learners. They were classified into two proficiency levels; low proficiency level and high proficiency level. The researcher concluded that, errors traceable to L1 transfer committed by low level EFL learners were more than those made by high level learners despite the fact that, a considerable amount of transfer errors were found in the production of high level learners.

Similarly, Chen (2007) investigated the acquisition of information sequencing in Chinese. The sample of the study consisted of 95 participants who were classified into three groups; 35 native learners of Chinese, 30 English learners of Chinese and 30 Korean learners of Chinese. The English and Korean learners of Chinese were further subdivided into three Chinese proficiency levels; intermediate, high-intermediate and advanced. The instruments used in the study were a sentence-combining task and discourse task. The results of the study revealed that, transfer from L1 (English) was found to be more evident in language of less advanced English learners of Chinese. One more study conducted by Liao, (2010) who examined the impact of L1 transfer on the acquisition of English phraseology. The participants in the study were composed of 265 EFL learners. They were divided into three groups; intermediate, high-intermediate and advanced EFL learners. The results of the study pertinent to the correlation between L1 transfer and L2 proficiency depicted that, language transfer errors decreased with the increase in L2 proficiency level. It is clear that the findings of the aforesaid studies lent support to the notion that L1 transfer is more evident at the early stages of L2 acquisition than advanced stages.

The notion that L1 transfer decreases as L2 proficiency level increases was not shared by some researchers who stated that, reliance on L1 is either more apparent among advanced learners of L2 than less advanced learners or remains stable across varied proficiency levels. One
of the supporters of this view is Klein (1986, p. 27) who contended that “the possibilities of transfer increase as knowledge of second language increases”. In support of Klein’s study, the European Science Foundation conducted a study on L2 learners from different L1 backgrounds. The analysis of the study results revealed that, all L2 speakers regardless of their L1s showed parallelism in development sequences of L2 at the early stages of acquisition. Thus, no L1 transfer was attested. However, the study revealed that as speakers achieved progress in their L2, they began transferring L1 forms into L2 (Klein & Perdue, 1993).

These findings are supported by a study implemented by Bhardwaj (1986) who examined the acquisition of English by an adult learner of Punjabi. The results of the study revealed that, the participant was not able to convey his Punjabi conception of location until he got some information of words like ‘up, down and on’ and improved the linguistic means required to make these elements the head of noun phrase. Thus, after these linguistic means were developed, the impact of L1 (Punjabi) appeared in phrases like ‘the up and the down’. In a similar vein, Salehi, (2009) implemented a study on the acquisition of preposition stranding and pied piping by Iranian EFL learners. The results of the study showed that, advanced Iranian EFL learners used pied piping more commonly than intermediate and low L2 proficiency level participants. This suggest that, advanced speakers relied on their L1 more than less advanced learners since Persian allows pied piping and prohibits preposition stranding.

Other studies showed that transfer errors remain stable regardless of L2 proficiency level. Hadadi, Goodarz and Abbasi (2014) looked at the correlation between transfer from L1 and English L2 proficiency level. Several instruments used by the researchers to collect the data required for the study including classroom observations, video recording and interviews. The findings of the study indicated that, the influence of L1 remained stable across the different
proficiency levels. In other words, L1 transfer never increased or decreased depending on L2 proficiency level. This view is shared by the results of a study conducted by Hussein and Mohammad (2011) who examined the effect of L1 transfer on English writing. Sixteen Arab learners of English participated in the study. The participants were requested to write short essays. The researchers arrived at the findings that, Arab EFL learners resorted to transfer from L1 regardless of their English proficiency levels. More precisely, participants from all L2 levels incorporated the patterns of L1 into L2.

In sum, the results of the aforesaid studies have contradicting views regarding the relationship between L1 transfer and L2 proficiency. The first view states that, reliance on mother tongue is more evident among less advanced L2 learners and such reliance on L1 decreases with increase in L2 proficiency (e.g. Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013). The second view points out that, L1 transfer either takes place mainly at advanced stages of L2 acquisition or remains stable across different L2 proficiency levels (e.g. Bhardwaj 1986; Hadadi, Goodarz & Abbasi, 2014; Hussein & Mohammad 2011; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). Such conflicting results of these studies can be explained by the fact that, the above mentioned studies investigated L2 learners from various L1 backgrounds acquiring different language subsystems, therefore it is not acceptable to hypothesize that the relationship between transfer from two distinct languages and L2 proficiency level is the same; for instance it is not reasonable to assume that the correlation between syntactic transfer from Dutch and English proficiency similar to the correlation between phonological transfer from Arabic and English proficiency. Another reason for the contradictory findings of the above mentioned studies is that, these studies employed different data collection instruments such as interviews, compositions, grammaticality judgment
tasks, translation tests and sentence-combining tasks, which resulted in different findings due to the nature of each test; for instance L2 learners who took a composition test showed different results from those who had interviews. In compositions the participants have more time to think before writing and that causes less reliance on mother tongue. Concerning the present study, L2 proficiency factor was investigated for the purpose of gaining more insight into its correlation with reliance on L1 (Arabic) as acquiring English prepositions.

2.3.2. Gender

The second factor that was examined in the present study is gender. According to Maria (2010) gender is regarded as one of the prominent factors to distinguish among L2 learners. Previous studies addressed gender differences among L2 learners had conflicting views. No definitive statement was said in this regard, this is in line with Ellis (1994) who stated that, the findings of studies regarding gender differences in second language acquisition are inconclusive. The analysis of some studies such as Abusaeedi, Asghar and Faezeh (2015), Al Yaari and Almaflehi (2013), Catalán and Alba (2008), Cheng (2001), Li (2004) and Llach (2009a) revealed two main contradicting findings; 1- the existence of gender differences among L2 learners, whether boys are superior to girls in particular L2 subsystem or vice versa. 2- No gender differences are attested, where both boys and girls achieve approximate proficiency in particular L2 structure.

A study conducted by Cheng (2001) investigated the production of English by Malay EFL learners. The study aimed at achieving two main objectives. First, researching the influence of transfer from L1 on the production of English by Malay learners. Second, investigating the role of gender in the acquisition of English as L2. The sample of the study consisted of 194
participants studying at two primary schools in Malaysia. The participants were instructed to perform four sets of writing tasks in order to achieve the purpose of the study. The findings of the study revealed that, first language transfer has a real impact on the acquisition of English. The study also showed that, the influence of transfer from L1 cannot be differentiated by gender. In other words, no gender differences were observed respecting reliance on native language when acquiring English.

These results are in support of a study conducted by Llach (2009a) on the role of gender in lexical transfer. The researcher used written composition to find evidence for lexical transfer across different grades. The findings of the study revealed that no gender differences were attested regarding reliance on mother tongue. These results are consistent with the findings of a study implemented by Abusaeedi, Asghar & Faezeh (2015) who examined the sources of errors made by Iranian EFL learners in their written production. The results of the study revealed that, errors mostly stemmed from intralingual interference rather than language transfer. The findings also showed that, there were no differences between males and females with respect to transfer errors.

However, the results of the studies by Abusaeedi, Asghar & Faezeh (2015), Cheng (2001) and Llach (2009) are not shared by Catalán and Alba (2008) who conducted a study to investigate the acquisition of English vocabulary by male and female EFL learners. The findings of the study showed gender differences when acquiring English vocabulary, particularly in the semantic field. This position is shared by Li (2004) who investigated the pronunciation of English vowels by males and females Taiwanese learners. The study sought to achieve two main purposes, firstly examining any evidence for the occurrence of transfer from L1 when acquiring English vowels. Secondly, understanding the impact of gender on the perception of vowels. The
results of the study revealed that, Taiwanese L2 learners faced difficulty pronouncing the English vowels \( i \) and \( u \). Such difficulty stemmed from L1 negative transfer. With respect gender differences, the writer arrived at the conclusion that, female Taiwanese EFL learners outperformed their male peers in terms of English vowels pronunciation. This means negative transfer from L1 is less evident among female learners than males.

Similarly, Al Yaari and Almaflehi (2013) implemented a study on the difficulties encountered by Saudi EFL learners when translating the English prepositions \( at, in \) and \( on \) into Arabic. The researchers came to the conclusion that, Saudi EFL learners confronted various problems in translating these three prepositions due mainly to negative transfer from Arabic. The study additionally displayed that, female learners’ performance in translating the prepositions \( at, in \) and \( on \) is better than their male counterparts. These findings are in agreement with a study carried out by Stapa and Irtalimeh (2012) on the impact of transfer from Arabic on the acquisition of rhetorical features by Jordanian EFL learners. The results relevant to gender differences revealed that, Jordanian female EFL learners used features of root repetition more commonly than their male peers due to transfer from Arabic.

It could be said that, the aforementioned studies have two conflicting views regarding the relationship between L1 transfer and gender where some studies stated that, EFL males and females are different with regard to reliance on L1 when acquiring L2 (Al Yaari & Almaflehi, 2013; Burstall, 1975; Catalán & Alba, 2008; Li, 2004; Stapa & Irtaimeh 2012), while other studies asserted that, there are no gender differences attested regarding transferring L1 structures into L2 (Abusaeedi, Asghar & Faezeh , 2015; Cheng 2001; Llach, 2009). Such conflicting views can be justified by the fact that, the above mentioned studies investigated the acquisition of different L2 structures by L2 speakers from various L1 backgrounds. More precisely, it is not
reasonable to assume that the relationship between gender and L1 transfer among Arab EFL learners is the same as the relationship between gender and L1 transfer among French EFL learners, definitely the results are distinct because both Arabic and French are different in terms of closeness to English. These studies also investigated the acquisition of English at different language levels; some studies concentrated on the area of lexis, whereas others examined the area of phonology. Therefore it is far-fetched that, the finding of studies regarding the correlation between gender and L1 transfer in the area of lexis are similar to those in the area of phonology or syntax. As for the present study, gender factor was investigated for the purpose of gaining more insight into its correlation with reliance on L1 (Arabic) as acquiring English prepositions.

The acquisition of English prepositions by Arab EFL learners was investigated by some studies. These studies attempted mainly to highlight the difficulties encountered by those learners and determining their sources. Next section reviews critically some studies on the acquisition of English prepositions by Arab learners of English.

2.4 The acquisition of English prepositions

2.4.1 Studies conducted on the acquisition of English prepositions among Arab EFL learners

This section presents some studies on the acquisition of English prepositions by Arab EFL learners. These studies aimed primarily at investigating the causes of errors committed by Arab learners when acquiring English prepositions, whether language transfer or intralingual interference. Following this, a cross-linguistic comparison between English and Arabic prepositional systems is introduced.
Habash (1982) carried out a study investigating the most common errors in the use of English prepositions by United Nations Relief and Works Agency (UNRWA) school students in Palestine. The participants in the study consisted of two samples of 120 students who were in their preparatory level. The students were studying at 14 UNRWA girls’ and boys’ schools and spread over different areas of Jerusalem. The instruments that the researcher used consisted of four written compositions and a multiple choice test comprising 100 items. The titles of the four compositions centered around four main ideas; describing a picture “on the way to Jericho”, writing about oneself, describing their favorite season and manner of spending a holiday. The time assigned by the researcher to complete each composition is one hour. According to Habash, the composition test was adopted in this particular study in order to give L2 learners the chance to reveal their communicative needs by themselves. This is supported by Pech, (1976) who stated that, composition tests help students to achieve their communicative purposes by themselves not anybody else. For the purpose of analyzing the errors made by the participants, the researcher employed EA. In conducting EA, the researcher took the following three steps as recommended by Corder (1967) 1- recognition of wrong sentences (Identification of errors), 2- classification of errors and 3-explanation of the errors. The study revealed four main findings 1- Most of the errors committed by the Palestinian learners of English were mainly due to L1 interference (transfer errors) and other errors were caused by some learning problems. More precisely, errors attributable to transfer from L1 constituted 65.3% of the total number of errors whereas; errors caused by other learning problems were 34.7%. 2- Three types of transfer errors were observed in the study; substitution, deletion and redundancy errors. Substitution errors were the most common errors in both transfer from Arabic and the other learning problems. The study also revealed that most of the errors made by the participants were in the prepositions in, at and to.
This is because these prepositions have a wide range of meanings and usages in English and have many lexical equivalents to Arabic. 3- Errors attributable to language transfer were influenced by Standard Arabic more than Colloquial Arabic. 4- The main learning problems encountered by the participants in the study were incorrect application of English rules and lack of English knowledge. The researcher concluded that, the faulty usage of prepositions by Palestinian EFL learners reflects weakness in English language in general.

Asma (2010) investigated the role of interference from Arabic in the acquisition of English prepositions by Algerian EFL learners. The investigation in this study was restricted to the spatial and temporal usages of English prepositions whereas, the other usages were excluded. The study sought to fulfill one objective, that is, to shed more light on the phenomenon of transfer i.e. to determine whether Algerian speakers of English fall back on their mother tongue when acquiring English prepositions. The sample of the study consisted of 30 EFL learners studying at Mentouri University in Algeria. All the participants in the study were native learners of Arabic in their third year level of study and chosen because they have achieved a good proficiency level in English. The instruments used in the study consisted of twenty sentences fill-in-the-blank test in which the participants were required to provide the suitable preposition that expresses spatial or temporal meaning for each sentence. The participants were asked to put Ø in the event that no preposition is required because there are cases where one language uses a preposition while another does not. The test was divided into three sections, section 1- instances where English and Arabic prepositions express similar meanings, section, 2- instances where prepositions in the two languages have different meanings and section 3- instances where one language uses one preposition while another does not. The researcher utilized CA in order to
describe the two prepositional systems of English and Arabic, where an extensive comparison of prepositions in the two languages was carried out in the study.

The analysis of the results of the study supported language transfer hypothesis, in which the Algerian learners of English resorted to transfer from Standard Arabic when they lacked the knowledge of English prepositions. The study also revealed that Standard Arabic was not the only source of transfer, Algerian learners of English were affected by their Algerian Arabic (Colloquial Arabic) and French which is their L2. In addition, the study reported that positive transfer from Standard Arabic and French occurred more than Algerian Arabic, and negative transfer from Standard Arabic was more evident than French and Algerian Arabic.

Another study in this area was carried out by Tahaineh (2010) who examined the acquisition of English prepositions among Arab EFL learners. The study attempted to achieve three objectives. First, determining the extent to which language transfer and intralingual interference affect the acquisition of English prepositions by Arab EFL learners. Second, investigating whether the difference in errors committed by the participants can be ascribed to their L2 proficiency level. Third, investigating whether the difference in errors made by the participants can be ascribed to the length of the composition tests. The sample of the study comprised 162 participants majoring in English at first, second and third year levels at Al-Balqa Applied University in Jordan. The participants were requested to write free written compositions on different topics. The sampling method utilized in the study was stratified random sampling of equal-sized strata. Each stratum consisted of 54 participant representing different academic year. For the purpose of examining the different sources of errors accompanying L1 transfer in the acquisition of English prepositions, the researcher employed EA. EA can be distinguished from other language acquisition approaches for it looks into all possible causes of errors made by L2
speakers. This is in line with Brown (1987) who argued that “EA became distinguished from CA by its examination of errors attributable to all possible sources, not just those which result from negative transfer of the native language”.

Tahaineh’s (2010) study revealed that, most of the errors committed by the participants were with the use of the following prepositions: in, by, on, to, with, of, at, from and for, and (58%=1323) of errors were caused by negative L1 transfer. It was also found that intralingual errors such as overgeneralization and misapplication of English rules were responsible for 42% of total errors. The study also showed that, L2 proficiency level has a significant impact on the errors made by the participants. More precisely, third year students’ total number of errors was 381, which is considered the least proportion of errors among the three groups of participants whereas, second year students’ total number of errors was 616 and first year students’ total errors was 1293. The study concluded that there was no significant correlation between the length of the composition and the number of errors made by the participants in the sense that, first year students who wrote compositions comprising 193 words in average committed 1293 errors. Second year students who wrote compositions containing 275 words in average made 616 errors and third year students who wrote compositions comprising 433 words in average committed 381 errors.

One more study carried out on the acquisition of English prepositions by Terdjat (2012) investigating difficulties encountered by Algerian EFL learners when acquiring the English prepositions in, on and at. The study attempted to fulfill two objectives; first, examining the challenges that Algerian EFL learners encounter when acquiring the prepositions; at, in and on. Second, examining the sources of prepositional errors made by the participants in the study. A total of fifty EFL learners participated in the study at Mohamed Khider University of Biskra. All
the participants were second year EFL learners at the department of English language. The instruments used in the study were comprised of two tests; Fill-in-the-blank test and Cloze test. The fill-in-the-blank test consisted of thirteen items and the participants were requested to fill the spaces in each item with one of these prepositions; *at, in, or on*. The cloze test was composed of a short paragraph containing several spaces, where the participants were involved to add the missing preposition in each space. The researcher arrived at the conclusion that, Algerian EFL learners experienced serious difficulties in their use of the English prepositions; *in, on* and *at*. This is exhibited in the fact that, the proportion of wrong responses in the use of these three prepositions, e.g. *in, on* and *at* outnumbered the proportion of correct responses. The findings additionally displayed that, Algerian EFL learners’ errors were committed basically due to transfer from Arabic and ignorance of the appropriate use of the three prepositions, *in, on* and *at*. The researcher explained his findings by two main reasons. First, the use of some prepositions in English language is unpredictable and illogical. In other words, the use of prepositions that accompany particular verbs, nouns and adjectives is highly idiomatic, leading EFL learners to make lots of errors when acquiring them. Second, when dealing with English prepositions, Arab EFL learners wrongly hypothesize one to one relationship. More specifically, Arab EFL learners propose that an English preposition can be exact equivalent to its Arabic counterpart, which creates much language transfer errors.

Having reviewed some studies on English prepositions, it was found that studies implemented on the acquisition of English prepositions by Arab EFL learners are only a few and this necessitates more studies to be carried out in order to fully understand the problems that Arab EFL learners encounter when acquiring this area of language.
The studies i.e. Habash (1982), Asma, (2010), Tahaineh, (2010) and Terdjat, (2012) have some limitations that should be taken into consideration by any study attempting to provide adequate account for the acquisition of English prepositions and the role of language transfer. First, the studies especially those made by Habash (1982), Asma (2010) and Terdjat, (2012) did not investigate any of the external factors interacting with L1 transfer which is a necessary requirement for any study examining the influences resulting from L1 transfer. In his study, Tahaineh (2010) examined L2 proficiency level as an external factor interacting with transfer from Arabic; however such examination was not based on a valid ground because he classified the proficiency level of his subjects according to their academic year. To be more specific, he assumed that third year L2 learners are more proficient in their L2 than second or first year. The accuracy of such assumption is not always guaranteed because it happens that many first and second year L2 learners achieve better L2 proficiency than third or fourth year learners. Therefore, this particular study hopes to bridge a gap in literature by examining two external factors interacting with L1 transfer namely; L2 proficiency level and gender. These two factors were particularly investigated in order to gain additional knowledge regarding the relationship between language transfer, gender and L2 proficiency, since this relationship is still a controversial issue. For the purpose of investigating the correlation between L2 proficiency level and L1 transfer, this study employed a cloze test that helped classifying the subjects into different proficiency levels. The classification of students in this test was as follows; 1- EFL students who scored between 1-10 were defined as low level students. 2- Students scored between 11-20 were regarded as intermediate. 3- Students who scored from 21-30 were defined as advanced. More details on the cloze test employed in this study are mentioned in chapter
three. The use of cloze test helped the researcher avoid some of the difficulties that the previous studies confronted when specifying the proficiency levels of the participants.

Second, while Tahaineh (2010) used written composition test as an instrument to investigate the errors in the use of English prepositions made by Arab EFL learners, this particular study did not employ this test. This is because composition test is time consuming and encourage the respondents to employ avoidance strategy when acquiring English prepositions. In composition tests the respondents are required to write sentences or paragraphs, prompting them to avoid the structures that are very distant from their native language. Conversely, in other tests such as fill-in-the-blank test the respondents are instructed to add only the missing words, which restrict utilizing avoidance strategy. Therefore, the present study employed fill-in-the-blank test to limit avoidance of prepositions to the minimum and consequently any occurrence of negative transfer from Arabic will be evident.

Third, the above mentioned studies, especially those implemented by Asma (2010), Tahaineh (2010) and Terdjat, (2012) were carried out in a restricted setting. To be more specific, the sample in these studies was chosen from one academic institution which limited the generalizability of the findings. Asma’s sample was chosen from Mentouri University in Algeria, Tahaineh’s sample was from Al-Balqa Applied University in Jordan, while Terdjat’s sample was selected from Mohamed Khider University of Biskra in Algeria. In addition, the sample in Asma’s study was rather too small where only thirty subjects took part in the study. Such small sample does not guarantee valid and strong generalizations regarding the acquisition of English prepositions by Arab EFL learners. For the purpose of ensuring maximum representativeness of the sample to the whole population and accordingly increasing the generalizability of the findings, the respondents in the present study were selected from ten universities in Jordan with
a total number of 355 EFL learners (Further discussion on this, is on chapter three). Fourth, all
the previously mentioned studies i.e. Asma, (2010), Habash (1982), Tahaineh (2010) and
Terdjat, (2012) that investigated the acquisition of English prepositions, did not highlight the
phenomenon of preposition placement in English namely; prepositions stranding and pied piping
despite the fact that, these two structures are part of the English prepositional system and widely
used among native and EFL learners. Researching these structures as a part of the English
prepositional system provides us with a deeper understanding of the problems that EFL learners
confront when acquiring English prepositions. Therefore, the present study that examined L1
transfer in the acquisition of English prepositions further investigated preposition stranding and
pied piping. Fifth, Terdjat, (2012) restricted the examination in his study to three English
prepositions; at, in and on, which does not give us a complete picture on the problems that Arab
EFL learners face as acquiring English prepositions. Thus, the present study investigated the
acquisition of many English prepositions in order to gain extensive comprehension for the
obstacles that Arab EFL speakers encounter as acquiring English prepositions.

Sixth, in his study, Tahaineh (2010) did not provide any kind of cross-linguistic
comparison between Arabic and English prepositions which is a necessary requirement for any
study investigating the influences resulting from L1 transfer. This is supported by Odlin (1989,
p.2) who stated that “such cross-linguistic comparisons constitute an indispensable basis for the
study of transfer”. In her study Habash (1982) conducted a comparison between Arabic and
English prepositions, however, such comparison could be argued to be sketchy in some ways
because the researcher focused primarily on temporal and spatial usages of prepositions in each
language and too little room was allocated for the other usages. Furthermore, not all English and
Arabic prepositions that express temporal and spatial meanings were presented. The comparison
was confined to following English prepositions *on, in, at, from, for, to, during, onto, into, out of, off, away* and *by* and to the following Arabic prepositions *cala, fii, ʔla, min, bi and li*. The comparison made by Habash (1982) did not include the functions and forms of prepositions in both English and Arabic. Furthermore, Asma (2010) made a cross-linguistic comparison between prepositions in English and Arabic, however Asma restricted her comparison to the spatial and temporal meanings of English and Arabic prepositions despite the fact that, prepositions in the two languages can express many other meanings. In her comparison, Asma did not elaborate on the functions that prepositions perform in a sentence in each language although those functions are deemed as the chief task that any prepositional system attempting to achieve. Terdjat, (2012) advanced a comparison between English and Arabic prepositions. However, this comparison was deemed limited in some ways; first, the researcher did not discuss the functions that English and Arabic prepositions perform in a sentence. Second, in his comparison, Terdjat, (2012) did not elaborate on the different usages of English and Arabic prepositions. Third, the researcher supplied few illustrative examples on prepositions in the two languages.

As a result of the limitations found in the comparisons presented by previous studies, the researcher is compelled to propose his own cross-linguistic comparison between prepositions in English and Arabic. The comparison that is presented in this study covers different issues related to the two prepositional systems such as, forms, functions and usages. This comparison elaborates on almost most of the usages of prepositions in the two languages with adequate illustrative examples. It is hoped that, the comparison presented in this study is more exhaustive than those presented by previous studies and would be able to pinpoint the areas of differences and similarities between the two prepositional systems.
2.4.1.1 A Cross-linguistic comparison between English and Arabic prepositional systems

English and Arabic refer to two distinct language families. While the former belongs to Germanic languages, the latter belongs to Semitic family (Alhaj, 2015). Therefore, it is expected that the two languages have two different prepositional systems. In an attempt to understand the differences and similarities between prepositions in English and Arabic, the researcher conducted a cross-linguistic comparison between prepositions in the two languages.

Before delving into the comparison between prepositions of the two languages, it is necessary to provide a working definition for prepositions. According to Quirk (1985, p. 673) “A preposition expresses a relation between two entities, one being that represented by the prepositional complement, the other by another part of the sentence”. With reference to the quotation above, a preposition has the function of connecting two parts of speech in the sentence. Usually the preposition is followed by its complement in a construction called prepositional phrase (PP) where the preposition links its complement or direct object to another part of speech in the sentence such as nouns, verbs or adjectives. Such relationship between prepositions and other parts of speech is illustrated in sub-section 2.4.1.1.2 below. The discussion on English and Arabic prepositions in this study concentrates on three main points for each prepositional system namely; forms, functions and usages.

2.4.1.1.1 English prepositional system

2.4.1.1.1.1 Forms of prepositions in English

With respect to form, English prepositions can be divided into two main types according to the number of words that a preposition consists of. The first type is simple prepositions or single-word prepositions; these prepositions comprise only one word such as under, around,
into, in, on, at etc. The second type is complex or multi-word prepositions; these prepositions contain two or three words such as according to, on behalf of, with regard to etc (Ballard, 2013). Complex prepositions cannot be constructed freely, for example in spite of cannot turn out to be *out spite of. Complex prepositions are treated as open class, indicating that they have no limited number because new combinations can be created (Grubic, 2004; Macková, 2012).

2.4.1.1.2 Functions of prepositions in English

Concerning the functions that English prepositions perform in a sentence, Vas (2006) stated that, prepositions in English serve to link two different grammatical elements as depicted in the three cases (A, B, and C) below.

A- English prepositions join a noun to another noun to show the relationship between the two as in sentence 1 below,

1-There is a **book** in the **bag**.

Here the preposition **in** links the noun **book** to the other noun **bag**.

B- English prepositions are also used to connect a noun to an adjective as exemplified in sentence 2 below,

2- Sheila is **fond** of **chocolate**.

The preposition **of** connects the adjective **fond** to the noun **chocolate** to show the relationship between the two.

C- English prepositions serve also to link a verb to a noun as in sentence 3.

3- The boy **ran** to the **gate**.
Here the preposition **to** is used to join the verb **ran** to the noun **gate** to show the relationship between them.

Usually prepositions in English are placed prior to their objects’ complement (like the examples above) but in some cases prepositions are placed at the end of the sentence which is termed as Preposition Stranding (Denison, 1998). Sentence 4 below reveals an example on preposition stranding.

4- Where is the letter that I asked you **about**?

In other cases, prepositions in English are placed at the beginning of the sentence, which is known as Preposition Pied-Piping (Cable & Harris, 2011). Sentence 5 below shows an example on preposition stranding. More insight into preposition stranding and pied piping will be discussed in sub-section 2.4.2.

5- **About** what are you talking?

2.4.1.1.3 Usages of prepositions in English

Quirk et al. (1985) classified the usages of English prepositions as follows; 1- prepositions indicating time (temporal) relationship 2- prepositions indicating spatial relationship; these prepositions are divided into prepositions of location and prepositions of direction, 3- prepositions denoting cause or purpose relations such as cause, reason, motive, purpose, destination or target, 4- prepositions indicating the relation of the means or agentive such as manner, means, instrument, agentive or stimulus, 5- prepositions indicating accompaniment relations 6- prepositions show the relation of support or opposition, 7- prepositions show the relation of concession and respect. These usages have been further defined and discussed by
some researchers (e.g. Celentano, 2008; Cossé, 2005) and will be discussed below briefly with some illustrative examples.

**The temporal usage:** These prepositions are used to indicate time span within which an action occurs (Hasan and Abdullah, 2009). According to Celentano (2008) the prepositions that express temporal relationship are *on, at, in, by, under, within, during, over, since, for, from*. The temporal meanings that each preposition expresses are shown below.

As stated by Celentano (2008), the meanings of temporal prepositions vary as follows; the preposition *on* is mainly used with week days (on Saturday) and with idiomatic expressions such as on time. *At* is used to denote clock time (at seven), day times such as noon and night and with some expressions like at present. *In* is used with seasons (in summer), a particular month (in January), year and century and also used with day times such as morning, evening and with expressions such as in time. *By*, is used to denote the idea of specified period of time (by ten o’clock). The preposition *within* indicates something takes place in a particular period of time. *Under* denotes that an action takes place in less than a particular period of time. *Over* indicates that something takes place in more than particular period of time. *During* indicates time span within which an action occurred. *Since* used to describe an action started in the past and continues up to now and used with specific date. *For* denotes an action started in the past up to the present and indicates the length of time within which something takes place. *From* is used to talk about the starting time for something to a point in the future. Some illustrative examples on prepositions that express temporal relationship are depicted below (Celentano, 2008)

6- She wakes up several times **during** the night.

7- I have not met him **since** 1999.
8- I have been waiting here for two hours.

9- From now on, we will never lose another game our rivals.

10- I am sure the train will be here in under one hour.

The spatial usage: Prepositions that express spatial relationships fall into two types; firstly, prepositions of location, secondly, prepositions of direction. This is in support of Bennett (1957, p.12) who pointed out that “Any comprehensive account of spatial uses of English prepositions assigns a prominent place to the distinction between locative sentences, such as ‘Gyneth is at the supermarket’, and the directional sentence, such as ‘Trevor went to the post-office”. The beginning will be with prepositions of location.

-Prepositions of location: These prepositions serve to indicate where something is located. According to Celentano (2008) the following prepositions are used to indicate location: Above, across, after, against, along, among, around, at, below, behind, beside, between, beneath, in, on from, under. Each of the above mentioned prepositions has a different meaning when expressing the notion of location. Such meanings are shown below as stated by Celentano (2008). Above means higher in position than something (above the table). Across means movement from one side to another (across the universe). After has the same meaning of ‘next one’ when talking about the notion of location (the shop is after the bank). Against used to describe something in contact with something else (leaning against the wall). Along means following the boundaries of something (along the river’s edge). Among means being within a group of people or things and usually used with more than two persons or things (among the trees). Around indicates closeness or neighborhood to something (around the house) and used to describe location on the opposite side. At used to indicate the place of something or somebody and indicates the location where
something takes place. *At* does not mean inside something but in front of it. *Behind* means at the back of something or somebody. *Beside* used to describe something that is next to something or someone. *Between* means within the distance separating two places, things or persons. *In* is used to describe the place of someone or something within certain area. *On* used to describe something in contact with or over another object. *From*, used to talk about the location of departure and to describe the location from which something is seen. *Under, beneath and below* are used similarly to show that something is lower in position than another thing. Having viewed the usages of prepositions of location, some illustrative examples are displayed below (Celentano, 2008)

11- He arrived **at** the train station at 3 pm

12- I will arrive **in** Tokyo in 4 days.

13- The trash is kept **behind** the building.

14- The book is **on** the desk.

15- His feet are **below** the desk.

**Prepositions of direction.** These prepositions are used to describe the change of position. According to Celentano (2008) the following prepositions are used to talk about the notion of direction: *in, on, at, near, down, towards, across, from, between and to.* It is believed that English prepositions vary in terms of expressing the idea of direction as follows: *Toward* means in the direction of something (toward the museum). *In* means within particular location or object (in the kitchen). *On* is used to denote direction towards someone or something (on the left). *Near* is used to express vicinity (near the train station). Across means from one side to
another (across the field). *At* expresses movement toward something or somebody. *Down* indicates the direction of something. *From* denote a position from which a movement begins. *To* is used to denote destination and between used to indicate having one thing on one side and another thing on the other side. Some examples on prepositions expressing the notion of direction are depicted below (Celentano, 2008)

16- You should turn left *at* Warner Street and you will see the bank.

17- The bus comes *down* the hill.

18- *From* where we stood we got an excellent view of the procession.

19- I am going *to* Edinburgh tomorrow

20- The mosque is located *between* the school and the art gallery.

Beside the temporal and spatial relationships, English prepositions are used to express different meanings as reported by Cossé (2005) who summarized these usages as follows:

**Prepositions indicating cause, purpose, target, motive and goal relationships:** These prepositions express the cause, purpose and target of happening of something such as (*because of, since, for, to, and at*).

Examples:

21 - *Because of* the storm all the flights are delayed

22 - He died *for* his country

23 - He made a doll house *for* his daughter.

24- He gave a doll house *to* his daughter.
25- The hunter aimed carefully at the deer.

**Prepositions expressing the notion of means, manner, instruments:** These prepositions have the meaning of ‘by means of’ or expressing instrumental meaning such as (*by, with, without*).

Examples:

26- I usually go to work by bus.

27- He caught the ball with his left hand

28- I drew a line without a ruler.

**Prepositions expressing the notion of accompaniment:** These prepositions express the meaning of ‘in accompany with’ or ‘to gather with’ such as (*with*).

Example:

29- I’m so glad you are coming with us

**Prepositions expressing the notion of support or opposition:** The prepositions *for* and *with* are used to denote the notion of support whereas as the preposition *against* denote the meaning of opposition.

Example:

30- Are you for or against the plan?

**Prepositions expressing the notion of concession and respect:** Such as the prepositions (*for, at, despite, in spite of, notwithstanding*)

Examples:
31-**For** an Englishman, he speaks Spanish remarkably well.

32- He was tolerant **in spite of** his background and education

In addition to the above motioned usages, English prepositional system is distinguished from prepositions in other languages by its preposition combinations, where a preposition follows a particular noun, verb or adjective. It is worth noting that, preposition combinations in English are difficult to master by non-native speakers due to the fact that, the use of preposition combinations is highly idiomatic and unpredictable. In other words, there are no certain rules that EFL speakers can follow to acquire these prepositions, making their use largely problematic for non-native speakers of English.

According to Grubic (2004) preposition combinations can only be acquired as an essential part of the noun, verb or the adjective they accompany (as part of the lexical unit). Some examples on preposition combinations are depicted below.

Examples:

32- He is addicted **to** watching TV

33- His love **of** singing developed when he was a child.

34- Children are dependent **on** their parents.

The present study compared the responses of the respondents concerning the different usages of English prepositions with one another in order to determine which usage poses the greatest difficulty for Jordanian EFL speakers. Determining the most difficult usage of prepositions would help EFL teachers in understanding the areas of difficulties in English prepositional system and thus, finding some suggested teaching methods for the benefits of EFL
speakers. The next sub-section discusses the Arabic prepositional system. The discussion concentrates on three main points regarding Arabic prepositions; functions, forms and usages.

2.4. 1.1.2 Arabic prepositional system

There are many differences between English and Arabic prepositions. First, prepositions in Arabic are much less in number than their English counterparts (Al-Marrani, 2009). English language comprises about one hundred prepositions (Leacock et al, 2014) whereas, in Arabic the number of prepositions is about twenty (Aldahesh, 2013). Second, English prepositions can be grouped into simple and complex (Ballard, 2013) whereas, in Arabic there is no such classification; all prepositions are simple (Al-Marrani, 2009). Third, many of the English prepositions are not considered as prepositions in Arabic but adverbs or semi-prepositions such as down, beneath, below, up, over and above. Therefore, complex and English prepositions that are considered as adverbs in Arabic were not examined in the present study. This is because a basic condition of investigating the influences resulting from L1 transfer is making contrastive analyses between the subsystems of two languages in contrast. Therefore, as a result of absence of complex prepositions from Arabic and using some English prepositions as adverbs in Arabic, there is no way of making such comparison. The discussion on Arabic prepositional system will start out with forms of prepositions in Arabic.

2.4.1.1.2 Forms of prepositions in Arabic

According to Saeed, (2014), Arabic prepositions can be classified into two primary classes; true prepositions and semi-prepositions. More details on the two classes of prepositions are discussed below.
1-True prepositions: This class contains the structures of language that function only as prepositions. True prepositions can be additionally subdivided into two types based on the number of letters that each preposition includes.

A- Separable prepositions: These prepositions can be bi-literal or tri-literal as shown in Table 1 below.

### TABLE 1: Separable Prepositions

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>fī</td>
<td>In</td>
</tr>
<tr>
<td>cala</td>
<td>On</td>
</tr>
<tr>
<td>’ila</td>
<td>To</td>
</tr>
<tr>
<td>Min</td>
<td>From\Of</td>
</tr>
<tr>
<td>Can</td>
<td>Away from</td>
</tr>
<tr>
<td>ḥatta</td>
<td>Until\ Up to</td>
</tr>
<tr>
<td>ēind</td>
<td>At</td>
</tr>
<tr>
<td>Maca</td>
<td>With</td>
</tr>
<tr>
<td>mundhu/mudh</td>
<td>Since\ So far</td>
</tr>
<tr>
<td>ḥasha, cada, khala</td>
<td>Except</td>
</tr>
</tbody>
</table>

B- Inseparable prepositions: This type comprises prepositions represented by a consonant and a short vowel. They usually function as prefixes to their complement. These prepositions are depicted in Table 2 below.
### TABLE 2: Inseparable prepositions

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bi</td>
<td>By, With, At, In</td>
</tr>
<tr>
<td>Li</td>
<td>To</td>
</tr>
<tr>
<td>Ta</td>
<td>By (in oath)</td>
</tr>
<tr>
<td>Wa</td>
<td>By (in oath)</td>
</tr>
<tr>
<td>Ka</td>
<td>Like</td>
</tr>
</tbody>
</table>

### 2- Semi-prepositions: This type is characterized for being multi-functional and comprising language structures that can function as nouns, adverbs and prepositions. Table 3 below includes some semi-prepositions in Arabic.

**Table 3: Semi-prepositions**

<table>
<thead>
<tr>
<th>Arabic</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>taḥt</td>
<td>Below</td>
</tr>
<tr>
<td>Qabl</td>
<td>Before</td>
</tr>
<tr>
<td>Bacd</td>
<td>After</td>
</tr>
<tr>
<td>Bain</td>
<td>Between\ Among</td>
</tr>
<tr>
<td>ḥawla</td>
<td>Around\ about</td>
</tr>
<tr>
<td>Dakhil</td>
<td>Inside</td>
</tr>
<tr>
<td>Kharij</td>
<td>Outside</td>
</tr>
<tr>
<td>’acula</td>
<td>Up</td>
</tr>
</tbody>
</table>
2.4.1.1.2.2 Functions of prepositions in Arabic

Arabic prepositions perform different functions in the sentence. Firstly, they serve to link a noun to another noun or a noun phrase to reveal the relationship between the two. It is worth noting that the parts; functions of prepositions and usages of prepositions are clarified with English examples alongside word for word transliteration. Transliteration is rather significant in order to illustrate how prepositions are used in Arabic.

Example:

1- أَهْمَدُ فِي ʾاَل-مَدْرَسَةِ. Ahmed is in the school.

In the sentence above, the preposition في links the noun Ahmed to the other noun ʾal-madrasah (school).

Secondly, Arabic prepositions are also used to relate a noun or a noun phrase to a verb in the sentence to reveal the correlation between them.

Example:

2- qafaztu can ʾal-soor. I jumped over the wall.

In the above sentence, the preposition can relates the verb qafaztu (jumped) to the noun ʾal-soor (wall) to reveal the relationship between the two. Thirdly, Arabic prepositions are served to join an adjective to a noun or a noun phrase to reveal the relationship between them.
Example:

3- ً‘انا قليقَنَّ 

In the aforesaid example the preposition min is used to join the adjective qaliqun (worried) to the noun phrase nata’ij 'al’mtihanat (exams’ results) to show the correlation between the two. Arabic is characterized for the frequent usage of some prepositions such as min, cala, maca, ٍفِ, َقن َبٍ and َلٍ whereas, other prepositions are rarely used or no longer used in Colloquial Arabic such as ُحَلَأَأ, ُعَأَأ and ُمُذْوُأ.

2.4.1.1.2.3 Usages of prepositions in Arabic

Al-Marrani (2009) classified the usages of Arabic prepositions as follows: 1- prepositions denoting temporal relationship, 2 - prepositions denoting spatial relationship, 3 - Prepositions expressing the notion of resemblance, 4 - Prepositions expressing the notion of cause, 5 - Prepositions expressing the notion of accompaniment, 6 - Prepositions expressing the notion of exception.

The temporal usage: According to Al-Marrani (2009) the prepositions indicating temporal relationship in Arabic are min, ٍفِ, َلٍ and َحَأُ. Some examples on prepositions that express temporal meanings are shown below.

Examples:

4- kharajtu min ُأِلفأجَر. I went out at dawn.

5- rajactu ٍفِ ُءأِسأقأ أ ُأـأَكأمأسأ A I came back at five o’clock.

6- darastu ُأِلأ ؤ ُأِلفأجَر. I studied till dawn.

7- darastu ُحَأُ ُءأـأَبأأ A I studied until morning.
The spatial usage: there are some prepositions in Arabic used to convey spatial meanings. These prepositions are min, fi, 'ila and cala as exemplified in the following sentences.

Examples:

8- rajactu min 'aljami cah. I came back from the university.

9- 'atalibu fi 'almadrasah. The student is in the school.

10- dhahabtu 'ila Madaba. I went to Madaba.

11- wadactu 'alkitaba cala 'atawaih. I put the book on the table.

In addition to the temporal and spatial relationships, Arabic prepositions are used to express other usages. These usages were reported by Al-Marrani (2009) as follows.

Prepositions expressing the notion of cause: These prepositions are min, can, fi, li and kār.

This is illustrated in the examples below.

Examples:

12 – mata min 'alkhawf. He died because of fright.

13 – ji’tu can mawcid. I came according to a prior appointment.

14- dhahabtu li 'adrusa I went to study

Prepositions expressing the notion of accompaniment: These prepositions are, fi, 'ila, bi and maca.
Examples:

15- kharaja ’al’ amī ru fī mwkibihi. The prince went out with his procession.

16 - jalastu ’ila ’abī. I sat with my father.

In addition to the above mentioned usages, Alayesh, (2012) indicated that Arabic prepositions can be used to express the notion of manner and instruments.

**Prepositions expressing the notion of manner and instruments:** These prepositions are *bi* and *fī*.

Examples:

17- qabaltuha bi ’ibtisamah. I met him with a smile.

18- katabtu bi ’alqalam I wrote with the pen.

Similar to prepositions in English, Arabic prepositions can be used to express idiomatic meaning where a particular preposition accompanies a noun, an adjective or a verb. The idiomatic use of prepositions in Arabic is confusing to non-native speakers of Arabic due to the great differences in such use between Arabic and other languages particularly English. Therefore, mastering such use in Arabic can only be attained through acquiring these prepositions as an integral part of the nouns, adjectives or verbs within which they occur. Some examples are presented below to illustrate this usage.

19- *cala* ’alaqal. At least.

20- yacetarifu bi ’al-jarima. He confesses the crime.
The two mentioned sentences show clear differences in the use of prepositions in Arabic and English. In sentence 19, Arabic uses the preposition *cāla*, whereas English uses the preposition *at*. In sentence 20, Arabic uses the preposition *bi*, whereas no preposition is needed in English (Alhawary, 2011).

With reference to the comparison conducted between English and Arabic prepositions in this study, it is fitting to say that prepositions in Arabic have some similarities to their English counterparts in terms of the functions they perform in the sentence and usages. However, the areas of differences among prepositions in the two languages appear to be greater because the two languages (Arabic and English) belong to two different linguistic families (Alhaj, 2015). Such differences when accompanied with a lack of knowledge of the right use of English prepositions lead to negative transfer from L1 and thus, more errors would occur.

The remainder of this section will present a short introduction on the occurrence of preposition stranding and pied piping in English and Arabic with some illustrative examples, following that the literature on the acquisition of these two constructions is reviewed critically.

### 2.4. 2 The occurrence of preposition stranding and pied piping in English and Arabic

Two options are available in all languages in terms of preposition placement, namely; preposition pied piping and preposition stranding. Preposition pied piping occurs in all languages, whereas prepositional stranding is available in some languages and absent from others (Sadighi, Parhizgar and Saadat, 2004). In English, both structures are allowed and occur mainly in the constructions of interrogatives and relative clauses. Preposition stranding appears more in informal English, whereas pied piping is a characteristic of the formal style of English (Carranza, 2009). Preposition stranding takes place when a preposition is left in a deferred, i.e.
stranded position at the end of a sentence without any immediately following object. The following examples show instances of preposition stranding in interrogatives and relative clauses in English.

1- Who did Sami talk to?  (Preposition stranding in interrogatives).

2- The man who Sami talked to was Mohammad.  (Preposition stranding in relative clauses).

Moreover, preposition pied piping occurs when a preposition along with its complement move to the initial position of the clause. The following examples depict instances of preposition pied piping in interrogatives and relative clauses.

3- About which subject have you read a book?  (Preposition pied piping in interrogatives).

4- The man to whom Sami talked was Kevin.  (Preposition pied piping in relative clauses).

Preposition stranding and pied piping in English can be syntactically interpreted by Convergence principle that was proposed by Chomsky (1995) and developed by Radford (2004). Convergence Principle states that “A head which attracts a constituent containing a feature [F] attracts the movement of the smallest accessible constituent containing [F] which will lead to a convergent (i.e. well-formed) derivation” (Radford, 2005,p.216). To make it clearer more details are depicted in the examples (5), (6) and (7) below.

5- [ C ] [TP the teacher [T was] [VP [V talking] [PP [P about] who]]]

[WH]

[TNS]

The abbreviations used in example (5); C refers to a complementizer which is a word such as (that, if and to) used to introduce a complementizer phrase CP (I am doubtful that he is
here). TP refers to a tense phrase which is a phrase headed by a tense such as (is, was, are…so on) and used to connect the subject of the sentence with the verb (the boy *was talking to somebody*). VP stands for a verb phrase which is a phrase headed by a simple verb, and consists of a verb, auxiliary, complement or adjuncts related to the verb (she *gave Mary the pen*). PP stands for prepositional phrase which is a phrase consists of a preposition with its complement (David was *at home last night*).

So, how are preposition stranding and pied piping derived based on Convergence Principle? According to Convergence Principle, the occurrence of preposition stranding requires two movements, first, the affixal [TNS] feature of C attracts the auxiliary *was* to move from T position to C as shown in sentence 6 below. Second, the WH features of C attract the smallest constituent having WH features. Therefore, the smallest WH constituent is the complement of the preposition *who* which moves to the C position leaving the preposition *about* stranded at the end of the sentence as displayed in sentence 6 below (Rezai, 2006). The symbol \( t \) in the sentence below refers to the trace that the constituent leaves after movement.

6- [CP who [C was] [TP the teacher [T t] [VP [V talking] [PP [P about]t]]]].

[WH]

[TNS]

In order to avoid stranding constraints and following Convergence Principle, the next smallest constituent that could be attracted by the WH features of C is the entire PP “about who” which moves to the CP position and that result in preposition pied piping as shown in sentence 7 below.
As mentioned earlier, both preposition stranding and pied piping are allowed in English. In contrast, Arabic allows pied-piping, while preposition stranding is prohibited. Arabic is similar to English because preposition pied piping is permissible in interrogatives where the WH- prepositional phrase PP (About whom was the teacher talking?) moves to CP position through pied-piping. However, Arabic does not allow pied piping in relative clauses unless the preposition is followed by a resumptive pronoun (*who was the teacher talking about him) which is not permitted in English. Furthermore, if the preposition is followed by a resumptive pronoun then the sentence is licit. The term resumptive pronoun refers “to the pronoun used immediately after noun to refer to that noun” (Gass and Selinker, 2008, p.521). Further example is in sentence 8 below.

8- * ʔldʒamisatu ʔlati min taxaradʒtu kabirah

The university which from graduated I big

The university from which I graduated is big.

In order to make sentence 8 grammatically correct in Arabic, the resumptive pronoun ha should follow the preposition min, so the sentence becomes as follows:

9- ʔldʒamisatu ʔlati minha taxarajtu kabirah
As mentioned earlier, prepositional stranding is not permitted in Arabic, but if the preposition is followed by a resumptive pronoun, then the sentence becomes grammatically correct as shown in sentence 10 below.

10- Man ʔlaði tadrusu maʕahu ?.

Who do you study with?

As seen in sentence 10 the preposition maʕa is followed by the resumptive pronoun hu in order to make the sentence grammatical in Arabic. The next sub-section discusses some of the studies on the acquisition of preposition stranding and pied piping.

2.4.2.1 Studies on the acquisition of preposition stranding and pied piping

The phenomena of preposition standing and pied piping were examined in many studies (Bardovi-Harlig, 1987; Carranza, 2009; Makvandi & Gorjian, 2014; Mazurkewich, 1985; Sadighi, Parhizgar & Saadat, 2004; Salehi, 2009). These studies aimed mainly at understanding; what do L2 learners prefer to use; preposition stranding or pied piping, whether a learner’s L1 plays a role in the acquisition of one of these two structures earlier than another and what are other factors along with transfer from L1 affecting the acquisition of these two structures.

Carranza (2009) investigated the acquisition of extraction constructions involving the object of a preposition, namely; preposition stranding and pied piping. The required data for the study were obtained from a bilingual child at two different points in time. The child, whose father is a native English speaker and his mother is a native speaker of Spanish, is speaking English and Spanish simultaneously. The forms produced by the bilingual child were compared to those made by English monolingual children and Spanish monolingual children. Besides,
these forms produced by the bilingual child were also compared to those found in the speech of his parents. With the aim of gathering data for the study, the researcher employed longitudinal audio-recordings of the development in the speech of the bilingual child. It is worth noting that, English allows both constructions; preposition stranding and pied piping, while in Spanish preposition stranding is not permitted and pied piping is licit. The results pertinent to this study revealed that, the production of pied piping by the bilingual child was 46% of the total instances of the two constructions; stranding and piping, whereas the results showed no instances of pied piping in the speech the English monolingual children in spite of the fact that, pied piping is permitted in English. Moreover, the results depicted that the bilingual child produced preposition stranding 26% of the time, while the Spanish monolingual children did not show instances of preposition stranding, which is not allowed in their native language. These results lent support to the influence of L1 on the acquisition of L2. This is because the abundant use of pied piping by the bilingual child as compared to his English monolingual peers is traced back to transfer from Spanish. Conversely, the production of preposition stranding by the bilingual child is attributed to transfer from English since preposition stranding in ungrammatical option in Spanish.

Salehi, (2009) examined the acquisition of preposition stranding and pied piping by Iranian EFL learners. The study sought to support markedness theory, which proposes that, the unmarked form ‘pied piping’ is supposed to be acquired earlier than ‘preposition stranding’ the presumably marked form. In Persian preposition stranding is prohibited, while pied piping is allowed. The participants in this study were composed of thirty MA students of non-English majors at the faculty of international relations. The participants were grouped into three proficiency levels; low, intermediate and advanced in order to determine the differences between the three groups of students with regard to the use of preposition stranding and pied piping. The
instruments utilized in this study were composed of two tests; 1- Oxford placement test, which was employed to measure the English proficiency level of the participants. 2- Elicitation task. This task consisted of 25 items, where the participants were involved to complete these items with *who, whom or which*, in order to form relative clauses. The researcher used ten sentences as distracters, meaning that those ten sentences were irrelevant to the use of either constructions; preposition stranding or pied piping. The findings of the study showed that, advanced Iranian EFL learners showed preference toward using pied piping over preposition stranding. This can be justified by transfer from L1 as Persian allows pied piping and prohibits preposition stranding. The results additionally showed that, Intermediate Iranian EFL learners produced more instances of preposition stranding than pied piping. Moreover, the study revealed that, the low level participants showed insignificant difference in the use of preposition stranding and pied piping, meaning that the participants had no significant preference toward one construction over another. However, the use of null preposition was the highest among low level participants. The researcher concluded that, the results of this study ran counter to markedness theory because the participants particularly at low level did not reveal significant difference in their use of both preposition stranding and pied piping.

One of the recent studies on this area of language conducted by Makvandi & Gorjian, (2014) examining the differences between Iranian monolingual\bilingual learners of English with regard to acquiring of preposition stranding and pied piping constructions. The study aimed at achieving two main objectives. First, investigating the difference between Iranian monolingual learners of Persian and Iranian Arabic learners of English with respect to the use of preposition stranding and pied piping. Second, examining the influence of gender on acquiring the two constructions by monolingual and bilingual learners. The participants were composed of 45 MA
participants at Islamic Azad University in Khuzestan and 65 BA participants at Ahvaz Islamic Azad University. Both groups of participants majored in English teaching. The instruments utilized in this study were comprised of two tests; first, Homogeneity tests: this test consisted of 50 multiple choice items in order to determine the English proficiency level for the MA participants and Nelson English language test to measure English proficiency for BA participants. Second, grammaticality judgment test. This test was used to measure the acquisition of preposition stranding and pied piping. The researchers came to the conclusion that, there were no differences between BA monolinguals and bilinguals regarding the use of preposition stranding. However, there are differences between BA monolinguals and bilinguals with respect to the use of pied piping. BA Bilinguals showed more instances of pied piping than monolinguals. The findings additionally revealed that, there were no significant differences between MA monolingual and bilingual participants with regard to acquiring preposition stranding and pied piping. As for gender differences, the results displayed that, BA female bilinguals outstripped their male peers in the production of both preposition stranding and pied piping.

Mazurkewich (1985) implemented a study on the acquisition of English preposition stranding and pied piping by French and Inuktitut learners of English. The researcher used question formation test to examine the acquisition of these two structures in WH questions. In her study, Mazurkewich followed markedness theory which treats preposition stranding as a marked form and therefore, expected to be acquired later than pied piping which is regarded as unmarked. This assumption is based on the ground that preposition stranding is rare among languages; whereas pied piping is more common and any language has preposition stranding should have pied piping but not the reverse. The findings of the study showed that French
speakers accepted pied piping in WH construction more easily than preposition stranding whereas, Inuktitut speakers accepted preposition stranding more readily than pied piping. In the case of French speakers, L1 transfer is the best explanation for such results because French allows pied piping and prohibits preposition stranding. But in the case of Inuktitut learners, L1 transfer is not the preferable account because Inuktitut does not have prepositions at all. However, Mazurkewich explained the results of her study in a different way; she argued that L1 transfer is insufficient explanation for the findings of the French participants because the dialect of those participants, which is Quebec, has some instances of preposition stranding. Moreover, she added that Inuktitut learners acquired preposition standing earlier than pied piping because they were more advanced than their French counterparts and the language of instruction for them at school was English. Thus, the results of her study lent support to markedness theory due to the fact that, French speakers acquired the unmarked structure, pied piping in advance of the marked structure, preposition stranding. Mazurkewich’s explanation was rejected by Kellerman and White (1986, cited in Klein 1993, p. 45) who stated that “the results simply reflect a transfer effect from French L1, while the Inuktitut learners’ performance is influenced by the fact that they received all their education in English, and thus, their developmental pattern (showing a higher proportion of PS) and proficiency levels cannot be compared with those of the French speakers”. Thus, French learners acquired pied piping earlier preposition stranding due to influences originated from their L1.

Bardovi-Harlig (1987) examined the acquisition of preposition stranding and pied piping by 95 participants representing 15 different L1s. The study replicated Mazurkewich’s ‘WH’ questions test and widened it to include relative clauses. More particularly, the study investigated the acquisition of preposition stranding and pied piping within the two main structures in which
they occur, namely; interrogative sentences and relative clauses. The findings of the study revealed that, the participants whose L1s did not have preposition stranding apparently accepted preposition stranding more easily than pied piping. Bardovi-Harlig attributed such result to the salience of preposition stranding. Salience is defined by Gass and Selinker (2008, p.145) as “the availability of input”. Salience explanation implies the fact that, the quantity of input that the speakers are exposed to regarding preposition stranding is higher than those of pied piping, and that makes L2 learners in Bardovi-Harlig’s study acquired preposition stranding in advance of pied piping. The study also indicated that, the participants showed instances of null-preposition in both relative clauses and WH construction. However, the occurrence of null-preposition was mitigated with the increase in the proficiency level of the participants. The researcher ascribed the emergence of null-preposition to mere ignorance on the part of L2 learners to the subcategorization knowledge of the verbs that accompany prepositions. In other words, the absence of a preposition in a sentence where it should be provided indicates that the learner is unaware that the verb requires a preposition to follow it.

Sadighi, Parhizgar and Saadat (2004) examined the acquisition of preposition stranding and pied piping among Iranian learners of English. It is noteworthy that, Persian allows preposition pied piping and prohibits preposition stranding as exemplified in sentences 1 and 2 below.

1- *Be chi negâhkard?* (Preposition pied piping)

At what did he look?

2- *Kodam sherkat kar kard dar?* (Preposition stranding)
Which company did he work in?

In Persian, a sentence like 1 is permitted whereas a sentence like 2 is prohibited unless the preposition is followed by its immediate complement. The participants in this study consisted of 80 Iranian learners of English studying at Shiraz University. For the purpose of collecting the data, a grammaticality judgment and correction task was used. A total of 24 sentences were presented in this task in which the participants were requested firstly to judge the grammaticality of the sentences and then correcting the faulty ones. The researchers found that, Iranian L2 learners accepted prepositions stranding readily, preferring it over pied piping, in spite of the none existence of preposition stranding in Persian. According to the researchers, Iranian L2 learners’ preference of preposition stranding over pied piping can be justified by the salience of preposition standing in English. Thus, the premise of language transfer is excluded. One more finding of this study is that, the participants showed evidence of null-preposition in interrogatives and relative clauses when acquiring both preposition stranding and pied piping. Null-preposition refers to the instance when the respondents do not provide a preposition where it is required. The case of null preposition is illustrated in sentence 3 below.

3- *who did you play------.

In the above stated sentence no preposition is provided, meaning that this sentence evidences the case of null-preposition.

Having discussed some relevant studies on the acquisition of preposition stranding and pied piping by speakers from different L1 backgrounds, it is of a great importance to note that, these studies have some limitations that one needs to avoid when conducting similar studies. Firstly, the results of some previous studies asserted the occurrence of transfer from L1 into L2
when the subjects’ L1s have the two constructions (preposition stranding and pied piping) or one of them. However, Mazurkewich (1985) in her study excluded the hypothesis of L1 transfer despite the fact that, her subjects’ L1 allows pied piping (in Mazurkewich’s study French is L1 for the first group) which prompts the possibility of reliance of the subjects on their mother tongue as acquiring pied piping. Such exclusion of the hypothesis of L1 transfer, led Kellerman and White (1986) to criticize Mazurkewich’s study. Kellerman and White (1986 cited in Klein, 1993, p. 45) pointed out that “the results simply reflect a transfer effect from the French L1”. Furthermore, Bardovi-Harlig (1987) stated that the early acquisition of pied piping by French EFL learners in Mazurkewich’s study is attributable to transfer from L1 because all the conditions for the occurrence of L1 transfer are available. The present study attempted to gain more insight into the role of transfer from Arabic in the preference of one these two structures over another due to the fact that Arabic allows pied piping and prohibits preposition stranding.

Secondly, the design of instruments employed by some of the studies reviewed above could be argued to show some levels of bias towards using preposition stranding over pied piping or vice versa. For example, Mazurkewich (1985) used question formation test to examine the acquisition of these structures in WH questions. However, the sentences presented by Mazurkewich appear to be biased towards pied piping. In Mazurkewich’s sentence, Cathy gave the book to Kevin, the whole prepositional phrase (PP) is underlined, which gives the participants a clue to front the whole PP and consequently shows preference for pied piping. Moreover, in her study Bardovi-Harlig (1987) used a sentence combination task to examine the use of preposition stranding and pied piping. The design of sentences in Bardovi-Harlig’s study showed bias towards using preposition stranding over pied piping. For example, when reading the sentence below
The policeman arrested him

John reported the accident to the policeman

It is expected that the respondents’ answers will be like this; either moving the preposition only which results in preposition stranding, e.g. *The policeman who John reported the accident to arrested him* or moving the whole PP which results in pied piping, e.g. *The policeman to whom John reported the accident arrested him*. In this case moving the preposition only is easier than moving the whole PP which is regarded as bias toward preposition stranding. Therefore, in the present study grammaticality judgment and correction task was used in which the participants were required to correct the wrong sentences by inserting the missing preposition either at the front position of the sentence or at the end. Employing such test rules out any biases toward using preposition stranding over pied piping or vice versa. Grammaticality judgment and correction task was acknowledged by many researchers as a reliable tool to measure the linguistic knowledge of L2 learners in general (El-nabih, 2010; Hirata, 2012; Liao, 2010; Makvandi & Gorjian, 2014; Sadighi, Parhizgar & Saadat, 2004) and to measure the effects resulting from L1 transfer (Lesniewska & Witalisz, 2007). Thirdly, some of the previously mentioned studies did not highlight cases where the participants showed instances of null preposition, which means no preference was observed toward using preposition stranding or pied piping (Carranza, 2009; Makvandi & Gorjian, 2014; Mazurkewich, 1985). Showing the instances of null preposition provides us with feedback about the subcategorization knowledge of English verbs that the participants have when acquiring preposition stranding or pied piping. Therefore, this study highlighted all instances of null prepositions that the participants showed when responding to the items of grammaticality judgment task. Fourthly, to the best of the researcher’s knowledge, no previous study specifically investigated the influence of language transfer on the
acquisition of preposition stranding and pied piping by L2 learners whose L1 is Arabic. This might result from the fact that, Arabic allows pied piping in interrogatives and prohibits preposition stranding, which decreases the possibility of transfer from L1 but does not exclude the premise that L1 plays a particular role in the acquisition of these two structures. Thus, due to the lack of studies conducted on Arab EFL learners, the present study attempted to bridge the gap in literature by examining the role of transfer from Arabic on the acquisition of preposition stranding and pied piping.

In sum, this section was divided into two sub-sections. Sub-section 1- reviewed some studies on the acquisition of English prepositions by Arab EFL learners. It was found that studies like Asma (2010), Habash (1982), Tahaineh (2010) and Terdjat, (2012) supported the premise of L1 transfer as an important factor in the acquisition of English prepositions. The review showed some limitations in all of these studies. Not all usages of English prepositions were investigated and the phenomena of preposition stranding and pied piping were excluded from investigation. Besides, most of these studies did not include any of the external factors that interplay with L1 transfer (except for Tahaineh 2010). The sample in most of these studies was restricted to one academic institution which limited the generalizability of the findings. Moreover, this section also presented a cross-linguistic comparison between English and Arabic prepositions where forms, functions and usages of each prepositional system were introduced. Sub-section 2 presented a short introduction about the occurrence of preposition stranding and pied piping in English and Arabic. This sub-section also highlighted some studies carried out on the acquisition of preposition stranding and pied piping. It was found that, these studies have some limitations. Some of these studies such as (Mazurkewich, 1985) denied any role of transfer from L1 in the acquisition of preposition stranding and pied piping, despite the fact that the findings of this
study clearly supported the position of L1 transfer as reported by Kellerman and White (1986 cited in Klein, 1993, p. 45) and Bardovi-Harlig (1987). Besides, the instruments employed by some studies showed bias towards using preposition stranding over pied piping or vice versa. Moreover, some studies in the review did not indicate to the occurrence of the phenomenon of null-preposition when acquiring preposition stranding and pied piping (Carranza, 2009; Makvandi & Gorjian, 2014; Mazurkewich, 1985).

2.5 Summary

This chapter elaborated on the definition of language transfer and its types. This chapter also discussed some of the theoretical views that are linked to language transfer and constituted the theoretical framework for the present study. CA and EA were viewed thoroughly. As it was mentioned, CA clearly supports the position of language transfer as the only factor accounts for L2 learners’ errors. As a result to the continuous critiques of CA approach, a modified CA emerged. The most important assumption of the modified CA is that, L1 transfer is no longer seen as the only factor influencing the acquisition of L2 but rather it interacts with other factors. Moreover, EA proposes other sources of errors than transfer from L1 such as intralingual interference. The present study employed CA to describe the prepositional systems in both English and Arabic, while EA was utilized to analyze the errors committed by the respondents when acquiring English prepositions. The chapter presented the interacting factors with L1 transfer that were investigated in this study; namely L2 proficiency level and gender. The results of studies that were conducted on the relation between proficiency level and language transfer revealed contradicting results. Some studies depicted that, transfer from L1 decreases as learners get progress in their L2 whereas other studies showed that, more instances of transfer from L1 are expected to occur as L2 proficiency increases or the rate of L1 transfer errors remains stable
across different proficiency levels. Besides, the studies carried out on the relation between transfer from L1 and gender showed conflicting results. Some studies revealed that, both male and female EFL learners resorted equally to L1 when acquiring L2, whereas other studies showed gender difference with respect to falling back on the knowledge of L1.

The chapter reviewed critically some studies that were carried out on the acquisition of English prepositions by Arab EFL learners. The findings of these studies clearly supported the hypothesis of language transfer as an important factor in the acquisition of preposition. The review showed that, these studies have some limitations that should be taken into account by any forthcoming study. More precisely, the external factors accompanying L1 transfer were not examined by most of these studies and the sample in some studies was limited to one academic institution. None of these studies investigated the phenomenon of preposition placement in English which results in two verities; namely preposition stranding and pied piping. This chapter also presented some pertinent literature on the acquisition of preposition stranding and pied piping. The results of these studies revealed conflicting findings, in which some studies obviously supports the role of transfer from L1 in the acquisition of these two structures whereas other studies elevate the status of other factors such as salience in favor of L1 transfer. The analysis of these studies showed some limitations. The instruments used in some of these studies were biased towards using preposition stranding over pied piping or vice versa. Some of these studies excluded transfer from L1 as an influential factor in the acquisition preposition stranding and pied piping despite the fact that all the conditions for its occurrence are available. Chapter three presents the methodology that was utilized in the current study.
CHAPTER THREE

METHODOLOGY

3. Introduction

This chapter describes the methodology that was employed by the researcher to achieve the purpose of the study. This includes the following sections: introduction, design of the study, population of the study, sample size, sampling procedures, instrumentation, scoring method, the selection of prepositions, generalization of findings, data collection procedures, data analysis and summary. The primary purpose of the present study was to investigate Arabic language transfer in the acquisition of English prepositions by Jordanian EFL learners.

3.1 Design of the study

According to Riazi (2016, p. 275) “research design refers to how the researchers plan their studies so that they can obtain answers to the stated research questions using systematic approaches”. In the present study the researcher employed a descriptive method for the purpose of describing the correlation between the variables under investigation. Calmorin, et al. (2007) stated that descriptive research usually aims at finding out new facts. These facts can be represented in various shapes such as growing the knowledge about particular phenomenon, increasing the generalization of the findings, gaining more insight into factors at play, finding out a new causal correlation between variables and providing more accurate diagnosis for the problem to be addressed. Gravetter and Forzano (2009) argued that descriptive research measure a variable or group of variables at their present conditions and concern mainly with the description of these variables.
As for the statistical methods used in the present study, the researcher employed descriptive statistics. This includes percentage of language transfer errors and intralinguual errors. In addition, one-way ANOVA was used. The use of one-way ANOVA can be justified by saying that, one-way ANOVA is employed when there is one variable with three or more levels or groups to determine the significant differences among the mean scores of the different groups (Urdan, 2011). In this particular study, the researcher used one-way ANOVA in cases where there is one variable with three or more levels. In research question four, one-way ANOVA was used because there is one variable with three levels. More specifically, the three levels of the variable are preposition stranding, pied piping and null prepositions. Thus, one-way ANOVA was utilized to determine the statistical differences among preposition stranding, pied piping and null prepositions in terms of use by learners. In addition, one way ANOVA was used to answer research question five because there is one variable with three levels. The variable is L2 proficiency and three levels are low proficiency level, intermediate level and advanced level. Thus, one-way ANOVA was employed to examine the statistical differences among the three levels of students in terms of negative Arabic transfer. It could be said that one-way ANOVA is appropriate in cases where there is one variable with three or more levels or groups. For the purpose of this study one-way ANOVA is more suitable than other tests such as two-way or three-way ANOVA. This is because two-way and three-way ANOVA require two or three independent variables with multiple levels, while in this study in questions four and five there is only one variable with different levels.

Besides, t-test was employed. T-test is normally used to ascertain the statistical significant difference exists between two groups (Biber, Conrad & Reppen, 2004). When using t-test there must be one variable with only two levels or groups such as male\female,
undergraduate\graduate. In this study, t-test was used because there is one variable (gender) with two groups of learners (males and females) and the researcher aimed to examine the statistical difference between these two groups in terms of negative Arabic transfer. Thus, t-test is appropriate for the purpose of this study.

3.2 Population of the study

According to Furlong et al. (2000) a population refers to “the large group of interest”. It is believed that the population comprises the entire group of people to whom the findings of the study can be generalized (Jackson, 2011). The population of the present study comprised Jordanian university students pursuing their Bachelor Degree in English Language.

Based on figures provided by the Ministry of Higher Education and Scientific Research in Jordan, as of 7-3- 2014, the total number of students majoring in English language at these universities is 4739 which constituted the population of the present study.

3.3 Sample size

In determining the sample size of a particular population, three criteria need to be specified. 1- The level of precision which is sometimes called sampling error and refers to the range where a true value of a particular population is expected to be. 2- The level of confidence or risk. The key notion in this term is that, when a population is sampled frequently, the average value of attribute attained through sampling is equal to the true population value and 3- The degree of variability. This term refers to the distribution of the attributes in the population of the study. As the heterogeneity of the population is greater, the sample size is required to be bigger in order to attain a high level of precision (Israel, 1992). For the purpose of computing the sample size of the present study, the researcher used Cochran (1977) sampling technique,
because it results in a larger sample size when compared to other techniques such as Cohen (1992). The equation below was utilized to determine the sample size of this particular study from a population of 4739 Jordanian EFL speakers pursuing their bachelor degree in English language.

\[
    n = \frac{n^0}{1 + \frac{n^0}{N}} \quad \text{.........Equation}
\]

For the purpose of calculation,

\[
    n^0 = \frac{t^2 pq}{d^2} = \frac{(1.96)^2 (0.5)(0.5)}{0.05^2} = 384
\]

Where, \( n^0 \) = sample size, \( t = 2 \) (Smola & Bartlett, 2001), \( t \) value for alpha .05 and population \( \geq 60 = 2 \), \( p = 0.5 \) (Krejcie & Morgan, 1970) suggested 0.5 point as an assumption point, \( q = 1 - 0.5 = 0.5 \) (Israel, 1996), where \( q = 1 - p \), but \( d = 95\% \) (0.05) (Smola & Bartlett, 2001) \( t \) value for alpha 0.05, and \( N = 4739 \).

\[
    n = \frac{384}{\frac{384}{4739}} = 355
\]

Based on the calculations above, the result is 355 (\( N=4739 \)) which is the minimum sample size of the present study.

### 3.4 Sampling procedures

In selecting the sample of the present study, the researcher employed cluster random sampling process where “all the individuals in the defined population have equal and independent chance of being selected” (Gay & Airasian 2003, p. 117). According to Adler and Clark (2007) cluster sampling procedures involve a random selection of clusters. Cluster sampling can be implemented in one stage, two stages or three stages based on the size and complexity of the target population (Vallabhanen, 2005). The process of selecting the sample
of the present study consisted of three stages which is termed ‘Three-stage cluster sampling’. Conducting three-stage cluster sampling involves selecting a random sample of clusters, then drawing randomly sub-clusters within each cluster, and lastly choosing a sample of elements (students) from each of the sub-selected clusters at random (Jank & Shmueli, 2010). In the first and the second stages, the researcher employed simple random sampling process. While in stage three, systematic random sampling was employed.

In the first stage, names of all universities in Jordan running an English language program at bachelor level were written on slips of papers and placed into a container. Then, ten papers out of twenty four were selected randomly by the researcher. The ten papers represented the number of universities (clusters) that constituted the sample of this study. This method of selecting random sampling is supported by some researchers such as Chilisa & Preece (2005) and Crano & Brewer (2002) who stated that, one way of selecting a simple random sample is through writing the names of individuals on pieces of papers and then randomly choosing some papers until the required sample is obtained. In the second stage of selecting the sample of the present study, the researcher also used simple random sampling technique, where some classes in the department of English language from each university were randomly selected (in a similar way to the method of container in the first stage). In the third stage of selecting the sample of the present study, the researcher used systematic random sampling. This process involved preparing a list of students’ names in each of the selected classes, then selecting randomly a starting point and choosing every nth name (fixed sequence of names) until the desired sample size was achieved. According to MacNealy (1999) sample selection from a population list is made through choosing the beginning at random, then selecting every nth name.
The prime reason for selecting ten universities in the present study lies in two points. First, the general rule in choosing the number of clusters (universities) in a particular study is that, the more clusters you select, the more representative your sample will be. In other words, it is preferable to include as many clusters as you can. However, the number of clusters included in a particular study is constrained by time, resources available and how many clusters can the researcher afford (Check & Schutt, 2010). Therefore, due to time and cost constraints the present study could not include more than ten universities. Second, the questionnaire that was distributed for the purpose of the present study was eight pages long. Therefore, it was a highly difficult getting a large number of students to take part in such long questionnaire, which requires the participants to sit for at least fifty minutes to answer all the items.

For the purpose of calculating the sample size that was selected from each of the ten universities, the researcher used the following formula.

I- Number of EFL learners at each university x 100 = % number of EFL learners

Total number of EFL learners (population)

II- % number of EFL learners x 355 = sample size in each university

100

The ten selected universities along with the sample size for each university are displayed in Table 4 below. The samples taken from the ten universities are not equal because the population is different from one university to another (some universities have a large number of students, while others have a small number). In other words, the sample selected from a particular university is proportional to the number of EFL learners at that university, meaning that the more the population of a university, the more students are selected from that university.
Table 4: Sample sizes according to universities

<table>
<thead>
<tr>
<th>University</th>
<th>Sample size</th>
<th>Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>The University of Jordan</td>
<td>24</td>
<td>English language</td>
</tr>
<tr>
<td>Yarmouk University</td>
<td>60</td>
<td>English language</td>
</tr>
<tr>
<td>Mutah University</td>
<td>33</td>
<td>English language</td>
</tr>
<tr>
<td>AL al-Bayt University</td>
<td>44</td>
<td>English language</td>
</tr>
<tr>
<td>Al-Balqa Applied University</td>
<td>120</td>
<td>English language</td>
</tr>
<tr>
<td>Al-Hussein Bin-Talal University</td>
<td>12</td>
<td>English language</td>
</tr>
<tr>
<td>Al-Ahliyya Amman University</td>
<td>3</td>
<td>English language</td>
</tr>
<tr>
<td>Al-Isra University</td>
<td>11</td>
<td>English language</td>
</tr>
<tr>
<td>Zarqa University</td>
<td>36</td>
<td>English language</td>
</tr>
<tr>
<td>World Islamic University</td>
<td>12</td>
<td>English language</td>
</tr>
</tbody>
</table>

3.4.1 Subjects included in the study

1- The subjects in this study were similar in terms of age, ranging from 19-22 with mean age 20.5. They were almost homogenous with respect to their native language (Arabic), educational and cultural backgrounds and nationality.
2- All the subjects in this study had studied English as a foreign language for almost twelve years under the unified educational system in Jordan before joining the university. However, most of their experience with English was limited to formal education since English is not widely spoken in Jordan.

3- The subjects in this study were majoring in English language at bachelor degree level. The rationale for such selection is that, the study required proficient participants in all English language skills in order to provide relevant and clear answers to the instruments of in the study. Therefore, this population was the most appropriate to achieve the purpose of the study.

4- The sample included only subjects who agreed to partake in the study.

3.5 Instrumentation

For the purpose of obtaining the data required for the present study, three tests were used: (1) Fill-in-the-blank test to investigate Arabic transfer and any other accompanying factors such as intralingual interference in the acquisition of English prepositions, (2) Grammaticality judgment and correction task to investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives and (3) The cloze test to measure subjects’ proficiency level (see Appendix I). All tests were administered in the same session.

3.5.1 Fill-in-the-blank test

This test was used to help answer research questions: one, two, three, five and six. A total of thirty six items were presented to the respondents in this test in which the English preposition in each item was missing. The respondents were requested to provide the appropriate preposition
for each item. Six usages of English prepositions were investigated in this test. The respondents were presented with six items on each prepositional usage. The distribution of test items is as follows.

1- Six items on prepositions expressing temporal relationship (1-6).
2- Six items on prepositions expressing spatial relationship (7-12).
3- Six items on preposition combinations. (13-18). This is specified as follows:
   - Noun+ preposition two sentences.
   - Verb+ preposition two sentences.
   - Adjective+ preposition two sentences.
4- Six items on prepositions expressing support and opposition (19-24).
5- Six items on prepositions expressing means, instruments and manner relationship (25-30).
6- Six items on prepositions expressing cause, purpose and target relationship (31-36).

The researcher used such distribution of test items because the current study aimed at identifying the most difficult usage of English prepositions to acquire by Jordanian EFL learners. The researcher analyzed the responses obtained from the respondents for each usage in order to show which usage pose the greatest difficulty for those learners. The two examples below, which were chosen from fill-in-the-blank test in this study, illustrate this issue. Sentence one is on the spatial usage of prepositions whereas, sentence two is on the temporal usage.

1- There is a big olive tree ----------- the middle of the garden
2- My favorite TV program starts ---------- 6:00 o’clock.

The rationale for using fill-in-the-blank test is that, it was recognized by many researchers as a reliable tool to measure the acquisition of different English structures in general,
and to measure the influence of language transfer on the acquisition of English prepositions in particular (Asma, 2010; Blom, 2006; Fion, 2005; Terdjat, 2012). In selecting the items of the fill-in-the-blank test, the researcher referred to some books related to the use of English grammar in general and prepositions in particular such as ‘Understanding Grammar’ (Roberts, 1954), ‘Remedial English Language’ (Agarwal, 2010) and ‘English Prepositional Idioms’ (Wood, 1967).

The selection of books from which the items of this test were chosen stems from the fact that these books present many illustrative examples on the use of English prepositions. Therefore, they are the most appropriate for this particular study. The items of this test were also chosen from bilingual dictionaries such as Oxford, Webster, Longman, Cambridge and Macmillan. These dictionaries were particularly selected, since they show detailed illustrations on almost all English prepositions with plenty of examples. Such method of selecting tests’ items was also adopted by some researchers such as Liao (2010) who conducted a study about the influence of transfer from Chinese on the acquisition of English phraseology. In selecting the tests’ items, Liao looked for collocations found in some English text books, previous studies and dictionaries.

The researcher assessed the psychometric properties for all the tests that were used in the present study. The validity and reliability for each test were measured. Validity refers to the extent to which instruments measure what they intend to measure or how well these instruments achieve their purposes (Kothari, 2004). In the present study both face and content validity of each test were taken into consideration. Face validity is defined as the degree to which a test appears suitable to measure what it is assumed to measure (Carducci, 2009). Whereas, content validity refers to the extent to which a measurement instrument fully covers all the meanings of the concept under investigation (Babbie, 2007). According to Furlong et al. (2000) face validity
is determined by a panel of specialists in the field of interest in order to evaluate whether the test is convenient to measure what it is supposed to measure. Similar to face validity, content validity is assessed by a jury of experts in the area of interest to evaluate the representativeness of the items on the test (Furlong, et al 2000). Both face and content validity of fill-in-the-blank test used in this study were measured by a panel of experts. The panel consisted of two academicians with PhD in Jordan; one specialist in linguistics from the Faculty of Arts, Mu’tah University and one specialist in linguistics from the Faculty of Art, Yarmouk University.

In determining the face validity of the test, the experts were asked to provide their feedback concerning the appropriateness of this test to investigate Arabic language transfer in the acquisition of English prepositions. With respect to content validity, the test was evaluated in terms of representativeness of the items to the different usages of prepositions under investigation. Any modification to the test items were conducted upon the suggestions of those experts. In addition to the experts’ review of fill-in-the-blank test items, thirty Jordanian EFL students majoring in English language at Middle East University participated in the pilot study to measure the suitability of this test to assess Arabic transfer in the acquisition of English prepositions.

Validity is a necessary condition for any measuring instrument; however, validity solely is insufficient because a test must be also reliable. Reliability is defined as the consistency of research measurement over time and it is based on the fact that whether the findings of a study are repeatable (Harats 2010; Nunan, 1992). For the purpose of measuring the reliability of fill-in-the-blank test, the researcher used Cronbach-alpha formula. The rationale for using this formula is that, Cronbach-Alpha is the most commonly used reliability measurement and it is utilized with test items that are scored dichotomously and non-dichotomously. This statement is
in line with Cortina (1993, p. 2) who states that “Alpha applies to any set of items regardless of the response scale”. With respect to fill-in-the-blank test, the items are scored dichotomously (correct\incorrect), indicating that Cronbach Alpha is a suitable formula to assess reliability for this test. The formula of Cronbach-alpha is depicted below, where, \(K\) is the number of items, \(S^2_x\) is the variance of the test scores and \(\sum S^2_i\) is the sum of variances of the item scores.

\[
\alpha = \left( \frac{K}{K - 1} \right) \left( 1 - \frac{\sum S^2_i}{S^2_x} \right)
\]

The value of Cronbach Alpha ranges between 0-1 (Mackey & Gass, 2012). It is generally agreed that, the minimum acceptable value of Alpha is .7 (Pallant, 2005). After piloting the items of fill-in-the-blank test, the analysis of results showed that, the test has a high level of reliability with Cronbach Alpha value of .9.

Intra-rater reliability was further employed to measure reliability for fill-in-the-blank test. Intra-rater reliability refers to the level of consistency of ratings done by a single rater. Table 5 below shows the results of intra-rater reliability for fill-in-the-blank test.

Table 5: Intra-rater reliability for fill-in-the-blank test

<table>
<thead>
<tr>
<th>Intra-class reliability</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Value</th>
<th>Df 1</th>
<th>Df2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average measure</td>
<td>.7</td>
<td>.623</td>
<td>.720</td>
<td>3.065</td>
<td>355</td>
<td>25134</td>
</tr>
</tbody>
</table>

The results obtained from Table 5 indicate that the value of intra-rater reliability for fill-in-the-blank test is .7, indicating that the test is reliable.
3.5.2 Grammaticality judgment and correction task

In English, preposition stranding and pied piping occur mainly in the constructions of interrogatives and relative clauses, whereas Arabic does not allow preposition stranding at all and confines pied piping to interrogatives. Therefore, the investigation in this study was limited to the case of interrogatives. More precisely, the study attempted to investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives. To achieve this purpose and to answer research question four, a grammaticality judgment and correction task was administered to all respondents in the study.

According to Gass (1983, p. 274) grammaticality judgments "refer to a speaker’s intuition concerning the nature of a particular utterance". Gass (1994) indicated that grammaticality judgments vary in three ways: first, some studies require L2 speakers to provide corrections to the sentences that they judged as ungrammatical; second, some studies require L2 speakers to make judgment for one sentence or select one sentence in preference to another; third, other studies request L2 speakers to give the possible answers they have.

Grammaticality judgment and correction task was found by many researchers as a reliable tool to assess the linguistic knowledge of L2 speakers (Chaudron, 1983; El-nabih, 2010; Gass, 1994; Liao, 2010; Tremblay, 2005). For example, Mandell (1999) made a comparison between grammaticality judgment task and dehydrated sentences test (a test that includes only content words such as nouns, verbs and adjectives). The participants in the study were Spanish L2 speakers. The findings revealed that, grammaticality judgment is a reliable tool to measure the linguistic knowledge of L2 speakers. Moreover, grammaticality judgment task is also useful
in investigating influences result from L1 transfer. According to Lesniewska and Witalisz (2007) grammaticality judgment task gives a chance to examine the possible influences resulting from L1 transfer because it motivates L2 learners to activate the knowledge of both mother language and target language.

With regard to grammaticality judgment and correction task utilized in this study, two sets of sentences were developed. The first set included fifteen interrogative sentences in which all prepositions were omitted and therefore, all sentences were incorrect due to a lack of prepositions. The second set consisted of six other sentences; these sentences were all grammatically correct and presented in the form of declarative sentences. In total, twenty one sentences were presented in this test; fifteen incorrect items and six correct items. The items of the two sets were not presented in order but in a random manner. All sentences used in this test are highly common in English to ensure that the participants are familiar with them. In this test, the participants were required to accomplish two main tasks. First, judging all sentences in terms of grammaticality and meaningfulness. In this task, three options were presented for each sentence as follows.

**CORRECT      INCORRECT       NOT SURE**

*e.g. - *what are you talking*

The participants were asked to read each sentence carefully and select one of above stated options.

After they completed the judgment task, they were allowed to start the second task. This task requested the respondents to correct the sentences that they marked as incorrect. Correcting
the erroneous sentences involved inserting the missing preposition for each sentence. Insertion of a preposition at the end of the sentence was considered as preposition stranding, whereas inserting a preposition at the initial position of the sentence was counted as pied piping. Furthermore, if the respondent marked the erroneous interrogative sentence as correct, then it could be concluded that he/she lacks the knowledge that some verbs in English pair with particular preposition. Whereas, if he/she marked the erroneous interrogative sentence as incorrect and inserted the right preposition, then it could be concluded that he/she has the required knowledge concerning the use of some verbs in English with particular preposition. The answers provided by the respondents to the items of this test would help in revealing their preference towards using pied piping over preposition stranding or vice versa. The preference of one construction over another enhances our comprehension regarding the role of L1 in the acquisition of preposition stranding and pied piping in interrogatives.

Based on the answers that were provided to the items of this test, these answers varied in different ways as follows:

1- Selecting incorrect option and inserting a preposition at the initial position of the sentence (pied piping).

2- Selecting incorrect option, and inserting a preposition at the end of the sentence (preposition stranding).

3- Selecting incorrect option without making any corrections.

4- Selecting incorrect option and making wrong corrections.

5- Selecting the option not sure and consequently no corrections were provided.

6- Selecting correct option and consequently no corrections were provided.
In selecting the items of the grammaticality judgment and correction task, the researcher referred to some previous studies investigated the use of preposition stranding and pied piping such as (Di, 2006; Kanasugi and Snyder, 2006; Soh, 1997). The items of this test were chosen from the above stated studies particularly because they present a considerable number of examples on preposition stranding and pied piping, which gives the researcher a good chance to select the most appropriate items for his study. Furthermore, some items were chosen from books related to the acquisition of these two constructions such as ‘Preposition Stranding From Syntactic to Functional Analyses’ (Takami, 1992). This book concerns mainly with the construction of preposition stranding apart from other grammatical structures i.e. it presents thorough description of preposition stranding in addition to pied piping.

As for the validity of the grammaticality judgment and correction task, the researcher measured both face and content validity of the test. The same panel of experts who evaluated fill-in-the-blank test was asked to judge the items of this test. In determining face validity, the experts were consulted regarding the suitability of the test to investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives. With regard to content validity, the experts were required to evaluate the test in terms of representativeness of the test items to a wide variety of English prepositions. Some modifications were made to the items of grammaticality judgment and correction task based on the suggestions of the experts. Having reviewed the items of this test by the panel of experts, a pilot experiment consisting of thirty Jordanian EFL students was conducted to test the appropriateness of the test (to investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives).
In a bid to measure the reliability of the grammaticality judgment and correction task, the researcher used Cronbach-Alph formula. The rationale for using Cronbach-Alph is that, it is used for both, test items that have multi response options such as (1= strongly disagree to 5= strongly agree) and for items that have two response options. This is in line with Yu (2001, p.1) who argues that “Cronbach-alpha can be used for both binary-type and large-scale data”. Since each item in this test has three response options as follows; (correct, incorrect and not sure) thus, Cronbach-alpha is the most appropriate formula to measure the reliability for this test. After conducting the pilot study for the items of this test, the results indicated that, the test is reliable with a Cronbach Alpha value of .9.

In addition to Cronbach Alpha, the researcher utilized intra-rater reliability for grammaticality judgment and correction task. The results of intra-rater reliability for this test are displayed in Table 6 below.

<table>
<thead>
<tr>
<th>Intra-</th>
<th>Lower</th>
<th>Upper</th>
<th>Value</th>
<th>Df 1</th>
<th>Df2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>class</td>
<td>Bound</td>
<td>Bound</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Average</td>
<td>.896</td>
<td>.879</td>
<td>.911</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>measure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Value</td>
<td>9.584</td>
<td>355</td>
<td>7080</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Df 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Df2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Sig</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 6, the results show that the value of intra-rater reliability for grammaticality test is .896, meaning that the test is reliable.

3.5.3 The Cloze test

English proficiency level was examined in this study as an independent variable, which is expected to interact with transfer from Arabic when acquiring English prepositions. For this
reason and due to the absence of any standardized national test in Jordan that measures English proficiency before entering the university, the researcher used an efficient measurement that allows respondents of the study to be grouped into three proficiency levels. A cloze test was utilized to achieve this purpose. This test helped answer the fifth research question in order to investigate whether there are any significant differences among English language proficiency levels in terms of negative Arabic transfer when acquiring English prepositions.

Cloze test was firstly used by Taylor (1953) as an instrument to measure reading skills of school children in the United States. From the sixties onwards, the test started to be used by some researchers to assess the proficiency level of EFL learners (Alderson 1978; Cohen 1980; Oller 1979). The rationale for using the cloze test in this study is that, many researchers have found cloze test as a valid and a reliable tool to measure all language skills and recommended it for assessing overall proficiency (Aitken, 1977; Jonz, 1990; Stubbs et al., 1974; Yamauchi, 1990; Yamashita, 2003). This is in support of Aitken (1977, p. 66) who stated that “I have found, after having constructed, administered and scored over a thousand cloze tests to ESL students in the last three years, that the cloze procedure is an extremely simple, yet valid language proficiency test”. To prove the validity of the cloze test in distinguishing EFL learners at different proficiency levels, Stubbs and Tucker (1974) conducted a study on 211 participants at the American University of Beirut. The cloze test that was used in their study includes 294 words with a systematic omission of every fifth word. The two researchers came to the conclusion that, cloze test is a powerful and economical tool to measure the proficiency for EFL learners.
When administering a cloze test to any group participants, they are required to restore the words that have been eliminated from a prose text. According to Steinman (2002, p. 293-294) there are two main types of cloze tests; 1- random cloze test: is a fixed rate deletion of every nth word (usually every fifth, seventh or ninth word is deleted). In random cloze test all types of words (nouns, verbs, adjectives and adverbs) have an equal chance of being deleted.

2- The rational cloze test: is a test where a particular type of words is deleted based on the purposes of testing. In the present study the researcher adopted the first type of cloze tests; the random cloze test. This test is deemed appropriate to achieve the interest of the study i.e. to measure general English proficiency of the participants, which necessitate testing all types of English words.

The cloze test that was administered to the respondents in this study adapted from a passage in the Wall Street Journal by Bilki (2011). The passage was particularly adopted since it was written in a simple and direct language fitting the level of the respondents. The total number of blanks is 30. The respondents were required to provide one word to fill each blank.

For the sake of clarification, below is an example taken from the cloze test used in this study.

- Zubair Kazi was born in Bhatkal, ----------- small town in southwest India. His dream was to be an airplane--- -------- and when he was 16 years old, he learned to fly a small - --------.

As for the psychometric properties of the cloze test, both validity and reliability were measured. Concerning the validity of this test, the panel of experts assessed both face and content validity of all test items. In measuring face validity of this test, the experts were asked to
assess the test in terms of appropriateness to measure the participants’ English proficiency level. In determining the content validity of the test, the panel of experts was requested to evaluate representativeness of the blanks in the text to the different parts of speech in English language. The experts’ feedback and recommendations regarding the cloze test were taken into consideration and any modifications to the test items were made upon their suggestions. Besides the panel review of this test, a pilot study comprising thirty Jordanian EFL students was carried out to test the suitability of the test to classify the students according to their proficiency level.

For the purpose of measuring the reliability of the cloze test, the researcher employed Cronbach Alpha formula as it is usually used to calculate reliability for both dichotomous (right\ wrong) and non-dichotomous (1= strongly disagree to 5= strongly agree) response scales. In the case of the cloze test, each item is scored either as correct or incorrect, meaning that Cronbach Alpha is an appropriate formula to assess the reliability for this test. Having conducted the pilot study for the items of this test, the analysis of the results indicated that the test is found to be highly reliable with Cronbach Alpha value of .962. Table 7 below depicts the values of Cronbach Alpha for the three tests utilized in this study.

**Table 7:** Cronbach Alpha values for the three tests

<table>
<thead>
<tr>
<th>Test type</th>
<th>Alpha value</th>
<th>Level of reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fill-in-the-blank</td>
<td>.9</td>
<td>High</td>
</tr>
<tr>
<td>Grammaticality judgment and correction task</td>
<td>.9</td>
<td>High</td>
</tr>
<tr>
<td>Cloze test</td>
<td>.962</td>
<td>High</td>
</tr>
<tr>
<td>Total</td>
<td>.922</td>
<td>High</td>
</tr>
</tbody>
</table>
In addition to Cronbach Alpha, the researcher used intra-rater reliability for cloze test.

The results of intra-rater reliability for cloze test are shown in Table 8 below.

**Table 8: Intra-rater reliability for cloze test**

<table>
<thead>
<tr>
<th>Intra-class reliability</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
<th>Value</th>
<th>Df 1</th>
<th>Df 2</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average measure</td>
<td>.933</td>
<td>.923</td>
<td>.943</td>
<td>15.014</td>
<td>355</td>
<td>10266</td>
</tr>
</tbody>
</table>

The analysis of results in Table 8 shows that the value of intra-rater reliability for cloze test is .933, meaning that the test is reliable.

**3.5.4 The Pilot study**

Piloting the instruments of the present study was done so as to obtain information related to the following points.

1- Assigning the time required to administer the instruments of the study.

2- Eliminating any kind of ambiguity or opacity from the items of the instruments.

3- Measuring the reliability of research instruments.

Thirty Jordanian EFL learners pursuing their bachelor degree in English language at Middle East University in Jordan participated in the pilot study. Data were collected and analyzed. Based on pilot study, adequate modifications such as addition or elimination of some items in the three tests were implemented in order to ensure better understanding of the research instruments on the part of the respondents when carrying out the main study. Thus, the pilot
study led to improving the research instruments in terms of length, form and time allocated for each test. The pilot sample was not part of the main sample in this study. The subjects in the pilot sample were from Middle East University which is not among the universities in the main study. Such procedure was followed because if a participant involved in both pilot and main sample, this will be counted as formerly having known the tests’ questions which affects the authenticity of the tests.

3.6 Scoring method

This section outlines the scoring method for the tests utilized in this study, that is, showing the criteria for scoring each of the three tests and how these tests were scored.

3.6.1 Fill-in-the-blank test

The answers provided by the subjects to the items of fill-in-the-blank test were scored in two methods; correct and incorrect. Correct answer was awarded one point, whereas incorrect answer was given zero. If a participant leaves any item blank, he/she was given zero. Providing no answer means, the participant lacks the knowledge about the correct use of the preposition for that item. The total score was out of thirty six.

3.6.2 Grammaticality judgment and correction task

Scoring of this test depended on the match between subjects’ answers and the pre-determined correct answer for each item. Therefore, the scoring procedures were according to the subsequent criteria:

1. The participant was awarded one point if:
A- The sentence is considered as correct and the participant marked (✓) inside the square assigned for correct option.

B- The sentence is considered as incorrect and the participant marked (✗) inside the square assigned for incorrect option, then providing acceptable correction.

2. The participant was not awarded points if:

A- The sentence is considered as incorrect and the participant marked (✓) inside the square assigned for correct option.

B- The sentence is considered as incorrect and the participant marked (✗) inside the square assigned for incorrect option without providing any corrections.

C- The sentence is considered as incorrect and the participant marks (✗) inside the square assigned for incorrect option and supplying irrelevant corrections.

D- Marking (✓) or (✗) inside unsure square.

3.6.3 The Cloze test

There are two methods of scoring cloze tests; the exact word method and the acceptable answer method. In the present study, the exact word method was utilized. The test consisted of a passage where thirty words were omitted and the test takers were asked to provide the missing words that suit the context. Correct answer was given one point, whereas incorrect answer was awarded zero. The total of points was thirty matching the number of blanks. Depending on the results obtained from the cloze test, the participants were classified into three levels of English proficiency. Subjects who scored between 1- 10 were defined under low level, subjects who scored between 11- 20 were regarded as intermediate, while those who scored from 21- 30 were regarded as advanced students.
3.7 The selection of prepositions

The selection of prepositions used in the present study depended on two chief criteria. First, the frequency of prepositions in English. More precisely, the study placed more emphasis on the most common prepositions in English language such as *in, to, for, at, of, with, about, on* and *by* (Grubic 2004). This is because the majority of errors attributable to negative transfer from L1 are in the use of these prepositions (Blom, 2006; Tahaineh, 2010).

Second, differences and similarities in usage. The selected items of fill-in-the- blank test focused on cases where prepositions in English and Arabic act differently as well as cases where prepositions in the two languages used similarly. Such selection enabled the researcher to pinpoint the occurrence of negative transfer from Arabic and intralingual interference more accurately. The examples below illustrate instances where English and Arabic prepositions act differently. It is noteworthy that the examples, 1 and 2 were selected from a book written by Celentano (2008), while example 3 was selected from a book written by Alhawary (2011).

1- He lives on New Jersy Avenue.
   - Hwa yacīshu ǧī ʿṭaɾīq New Jersy.

2- My Friends will come to visit me on Tuesday.
   - ’asdiqaʾi sawfa yazoronani yawma ’althulathaʾ

3- He enjoys the program.
   - Hwa yastamticu ǧī ʿalbarnamij.

Based on sentence 1, English uses the preposition *on* with streets and avenues, whereas in Arabic the case is different, in which the preposition ǧī which is equivalent to the English preposition *in*, is used with streets and avenues. In sentence 2, English uses *on* with week days,
whereas in Arabic no preposition is required with week days. With reference to sentence 3, in English a verb like ‘enjoy’ is not followed by any preposition at all. While, in Arabic the verb enjoy ‘yastamtcu’ should be accompanied with the preposition bi which is equivalent to by in English. It is assumed that, such differences in use between prepositions in English and Arabic are the leading factor for the faulty usage of English prepositions by Arab EFL learners. This is supported by Lindstromberg (2010, p. 5) who argues that “More often perhaps, mistakes stem from differences between English and the mother tongue. For instance, Japanese has postpositions not prepositions (and not many of them) while Korean has no such words at all. This must hinder learning the many prepositions of English”. Furthermore, sentences 4, 5 and 6 show instances where prepositions in English and Arabic are used similarly. Example 4 was chosen from a study made by Kodachi (2005), while examples 5 and 6 were chosen from a study conducted by Mahmoodzadeh (2012).

4- He dropped the keys on the floor.
- Hwa ’asqata ’almafati cala ’al’ard

5- Your success depends on your self-confidence.
- Naja’hukum yactamidu cala thiqatum bi’anfusikum.

6- I worked for two hours in my office yesterday.
- ’ishtaghaltu lisacattain fi maktabi bi al’ams

In sentence four above, Arabic uses the preposition on, which is similar to the English preposition cala, to express spatial meaning where something is placed on another object. In sentence 5, the English verb depend is followed by the preposition on. Similarly, in Arabic the verb depend ‘yactamidu’ is normally accompanied with preposition cala, which is equivalent to
on in English. In sentence 6, English uses the preposition in to express spatial meaning. In a similar way, Arabic uses the preposition ُبُ, which corresponds in English to indicate spatial meaning. Errors sometimes arise, even in the case of similarities between English and Arabic prepositions. These errors are always treated as intralingual in nature. The prepositions investigated in this study were simple English prepositions; those consist of one word, whereas complex prepositions were beyond the scope of this study because they are not regarded as prepositions in Arabic but adverbs (Hamdallah & Tushyesh, 1993) and consequently any role of negative transfer from L1 is excluded. All items of fill-in-the-blank test utilized in this study appear in appendix I on pages 108-109.

3.8 Generalization of findings

The term generalization of findings refers to “the extent to which research results can justifiably be applied to a situation beyond the research setting” Chaloub-Deville et al., (2006, p.3). Among the issues pertinent to generalization of findings are the characteristics of the sample of the study and the wider group that we intend to generalize our findings to. According to Chaloub-Deville et al., (2006), the method utilized to select the sample of the study has a great impact on the generalization of research findings because elicitation method influences the sort of the data obtained. As for the present study, the researcher used random sampling process in order to enlarge the possibility of generalizing the research results to the whole population. In random sampling method “every subject or unit has an equal chance of being selected” (Fink, 1995, p.10). When each subject in the population has an equal chance to be part of the sample, any biases due to researcher’s preferences will be eliminated and consequently increasing the possibility of generalizing the findings to the whole population (Latham, 2007).
3.9 Data collection procedures

In implementing the procedures related to collecting the data required for the present study, the directors of English language departments at the ten selected universities were contacted to ensure participation of the targeted subjects in the study. A letter containing information about the purpose and the nature of the study was sent to those directors. After obtaining the required permissions, the actual procedures of data collection began. The process of selecting the sample and administering the tests in the ten universities was managed by the researcher and two other instructors. Data collection process started at Al-Balqa Applied University and ended at Zarqa Private University. The procedures that were carried out in selecting the sample from each university were; some classes from the department of English language at each university were selected randomly using simple random sampling method; following that, some students from the selected classes at each university were chosen randomly until the desired sample is obtained. The selection of students was carried out using systematic random sampling method, where a list containing all students’ names was prepared, then the researcher assigned a starting point and selected every nth name. The selected students in each class were asked to remain seated whereas the other students were thanked and informed gently to leave the class.

Having selected the sample of the study, each respondent was asked to sign a consent form in order to secure the voluntary nature of participating in the present study. Then, the respondents were briefed about the purpose of implementing the study. Also they were informed that their results in the tests will be kept confidential and will never affect their grades. The respondents were instructed not to write their names but only to state their gender since gender factor was investigated in the present study as independent variable interplaying with
transfer from native language. Following that, the respondents were asked to begin with answering the items of the fill-in-the-blank test, then; they were allowed to take the grammaticality judgment task. Finally, they took the cloze test. In brief, the subjects were told to do the following:

1) In fill-in-the-blank test: to fill the blank in each item with the appropriate English preposition.

2) In grammaticality judgment task: to judge the grammaticality of the provided sentences, if the participant judges a sentence as incorrect, he/she is requested to correct it by inserting the right preposition.

3) In cloze test: to restore the appropriate words omitted from the text.

### 3.10 Data analysis

For the purpose of analyzing and computing the quantitative data obtained from the instruments of the study, the Statistical Package of Social Science SPSS was employed. The findings of the three tests were calculated via different statistical analyses i.e. 1-descriptive statistics (percentage and mean) and 2-inferential statistics (t-test and one-way ANOVA). Descriptive statistics were used to describe the properties of a sample or the relationship among variables that have been investigated in the study (Rubin and Babbie, 2009). In contrast, inferential statistics utilizes the information drawn from the sample of the study to make generalizations about the whole population (Gravetter & Forzano, 2009). The research questions posed in this study alongside the statistical analyses that were used to analyze the answers of each question are depicted below.

Question 1- Does negative Arabic transfer influence the acquisition of English prepositions by Jordanian EFL learners?
In answering questions 1, descriptive statistics were used. This includes percentage of language transfer errors. According to McNabb (2015, p.167) “descriptive statistics are used to numerically describe sample units, phenomena and other variables of interest”. As question one aimed at investigating the influence of negative Arabic transfer on the acquisition of English prepositions by Jordanian EFL learners, descriptive statistics are appropriate to fulfill the objective of this question. This is because descriptive statistics provided the researcher with the percentage of language transfer errors made by the respondents, which helps achieving the purpose of question one. An error can be classified as transfer from L1, when a respondent wrongly uses a preposition that exists in his native language in the target language context.

Question 2- Does intralingual interference contribute to the errors in the acquisition of English prepositions by Jordanian EFL learners?

In answering question 2, descriptive statistics were employed. This includes percentage of intralingual errors. As indicated earlier, descriptive statistics are utilized to describe numerically the variables of interest (McNabb, 2015). Since the purpose of question two is to investigate the influence of intralingual interference on the acquisition English prepositions by Jordanian EFL learners, which involves providing numerical values regarding the percentage of intralingual errors, descriptive statistics is suitable to achieve the purpose of this question. Moreover, t-test was utilized in order to ascertain whether the difference between language transfer errors and intralingual errors is statistically significant or not. t-test is normally used to determine if there are any statistical significant differences between the mean of two groups (Urdan, 2009). An error can be categorized as intralingual, when a respondent mistakenly use a preposition in the target language as a result of difficulty of L2 but not interference from L1.
Question 3 – Which of the different usages of English prepositions is the most difficult to acquire by the Jordanian EFL learners?

For the purpose of answering question 3, descriptive statistics were utilized. This includes percentage of errors in the different usages of English prepositions. As the aim of question three is identifying the most difficult usage of English prepositions to acquire by Jordanian EFL learners, descriptive statistics are appropriate to accomplish the aim of this question. This is because descriptive statistics provide the researcher with feedback regarding the percentage of prepositional errors made by the respondents, which in turn help achieving the aim of this question. In Answering research question three, one-way ANOVA was further used. One-way ANOVA is normally utilized when there is one variable with three or more levels and groups to ascertain the statistical differences among the multiple levels or groups. The justification for using one-way ANOVA in answering research question three is that, there are six different usages of prepositions and the researcher aimed at examining the statistical differences among these six usages in terms of errors made by the respondents. Thus, one-way ANOVA is the appropriate statistical test for research question three.

Question 4- Do the Jordanian EFL learners show preference toward pied-piping in interrogatives over preposition stranding due to the absence of preposition stranding from Arabic?

Question 4 was answered using descriptive statistics. This includes percentage of use for pied piping, preposition stranding and null prepositions. Descriptive statistics are appropriate to fulfill the objective of question four. This is because descriptive statistics supply the researcher with feedback pertinent to the percentage of production of the three above mentioned constructions. In addition, one-way ANOVA was used to answer research question four. It is
generally agreed that one-way ANOVA is used when there is one variable with three or more levels. One-way ANOVA aims to examine the statistical differences among those multiple levels or groups. The justification for using one-way ANOVA in answering research question four is that, there are three groups of preposition placement in English, namely preposition stranding, pied piping and null prepositions and the study aimed at examining the statistical differences among the three groups of prepositions. Therefore, one-way ANOVA is the most suitable test to answer question four because there is one variable with three groups (the three groups of prepositions).

Question 5- Are there any significant differences among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions?

For the purpose of answering research question 5, one-way ANOVA was utilized. One-way ANOVA is usually used to examine the significant differences among mean scores obtained by two or more groups in a research study (Phakiti, 2014). As mentioned earlier, one-way ANOVA is applicable when there is only one variable with two or more groups. With regard to research question five, one-way ANOVA was used because there is one variable (proficiency level) with three groups (low proficiency learners, intermediate proficiency learners and advanced proficiency learners). Therefore, one-way ANOVA is appropriate to examine the statistical differences between the three groups of learners.

Q6: Are there any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions?
To answer question 6, t-test was used. T-test is normally employed to determine the significant differences between mean scores of two groups (Urdan, 2009). To conduct t-test there should be one variable with only two levels or groups. For the purpose of research question six, the use of t-test can be justified by saying that, there is one variable (gender) with two groups (males and females). Therefore, t-test is suitable to examine the statistical differences between the two groups in terms of negative Arabic transfer.

It is worth noting that, the present study utilized the means of two second language approaches, namely Contrastive Analysis and Error Analysis. Contrastive Analysis was used to compare the prepositions in English and Arabic for the ultimate purpose of showing the similarities and differences between the two prepositional systems. While, Error Analysis was used to analyze the errors made by the respondents in order to determine their sources; whether language transfer or intralingual interference. Based on error analysis approach, the following procedures were followed when analyzing respondents’ errors. 1- Collecting the sample of the study, 2- Identification of errors, 3- Grouping errors into substitution, addition and omission, 4- Categorizing errors according to their sources, whether language transfer or intralingual errors.

3.11 Summary

The objectives of the present study are manifested in the following six points:

1- To investigate the influence of negative Arabic transfer on the acquisition of English prepositions by Jordanian EFL learners.

2- To investigate the influence of intralingual interference on using English prepositions by Jordanian EFL learners.
3- To identify the most difficult usage of English prepositions for Jordanian EFL learners to acquire.

4- To investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives.

5- To investigate whether there are any significant differences among English language proficiency levels in terms of negative Arabic transfer when acquiring English prepositions.

6- To investigate whether there are any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions.

With the aim of achieving the above mentioned purposes, the researcher employed three different tests. A- fill-in-the-blank test was used to investigate the Arabic transfer and any other accompanying factors in the acquisition of English prepositions. B- Grammaticality judgment and correction task was employed to investigate Jordanian EFL learners’ acquisition of English preposition pied-piping and stranding in interrogatives. C- Cloze test was utilized to assess the proficiency level of Jordanian EFL learners. The population of the present study consisted of 4739 Jordanian EFL learners. A total of 355 students from ten universities in Jordan participated in this study. A quantitative approach was used in this study in which the data obtained from the respondents were analyzed using descriptive and inferential statistics.
CHAPTER FOUR
FINDINGS

4. Introduction

The present study aimed chiefly at investigating Arabic language transfer in the acquisition of English prepositions by Jordanian EFL learners. Three instruments were used in order to collect the data obtained from the respondents; 1- Fill-in-the-blank test, 2- Grammaticality judgment and correction task and 3- Cloze test. The data required for the present study were collected from a sample of 355 EFL learners studying at ten universities in Jordan. The respondents were both males and females, ranging from first to fourth academic year. In classifying learners’ errors, the researcher followed the procedures proposed by Corder (1974). More details on the procedures used in conducting EA research are mentioned in Chapter Two on pages 39-42. For the purpose of answering the research questions posed in this study, the statistical tests employed were; 1- descriptive statistics (percentage) and 2- t- test and one-way ANOVA. This particular chapter reports the statistical analysis of the results with reference to the research questions formulated in Chapter One. The chapter concludes with a summary of the results obtained from the three aforesaid instruments. Six research questions were posed in this study.

Before reporting the results of this study, it is fitting to discuss the assumptions of statistical analyses related to the study. This includes normality test and linearity test. Normality is defined as the shape of data distribution for a variable and its correspondence to the normal distribution. Thus, normality test is conducted to ensure that the data used in the study are normally distributed. Normality is crucial in many parametric statistical methods. Furthermore, understanding the distribution of data could provide more information on the underlying
mechanisms for generating the data. When the assumption of normality is violated the interpretations and inferences regarding the data will be affected. Normally distributed data have a symmetric bell-shaped curve, which have the highest frequency in the middle, with lower frequencies towards the extremes (Gravetter & Wallnau, 2000). It is fitting to indicate that sample size has an impact on normality test that is, when conducting normality test on a small sample size, there is a probability of concluding that the data are normal when in fact they are not (Ahad et al, 2011).

For the purpose of this study, Skewness and Kurtosis were employed to test normality of data. Skewness is used to find out the extent of asymmetry in a given frequency distribution. Symmetric distribution means the distribution of data above the mean is a mirror image of the distribution below the mean. Negative skewness indicates that the distribution is spread out to the left of the mean, while positive skewness indicates that the data is spread out to the right. Kurtosis is used to find out whether the data are peaked or flat relative to normal distribution. Positive kurtosis indicates a peaked distribution, while negative kurtosis indicates a flat distribution (Hashim & Abdul Majeed, 2013). The acceptable values of Skewness and Kurtosis must range between -2 and +2 (George & Mallery, 2007). Thus, the significance of Skewness and Kurtosis stems from the fact that they measure normality of data distribution in terms of asymmetry and shape of distribution. Table 9 below shows the values of Skewness and Kurtosis for the three tests used in this study.
Table 9: Values of Skewness and Kurtosis for the instruments of the study

<table>
<thead>
<tr>
<th></th>
<th>Fill-in-the-blank</th>
<th>Grammaticality judgment</th>
<th>Cloze test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skewness</td>
<td>.590</td>
<td>.514</td>
<td>-.053</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>.212</td>
<td>-1.121</td>
<td>-1.053</td>
</tr>
</tbody>
</table>

The analysis of results in Table 9 reveals that the values of Skewness and Kurtosis for the three tests fall within the acceptable range 2 and +2. These results indicate that the data relevant to these tests are normally distributed. The six research questions that were formulated in this study alongside their results are presented below.

4.1 Negative transfer from Arabic in the use of English prepositions

4.1.1 Research Question One

Question 1- Does negative Arabic transfer influence the acquisition of English prepositions by Jordanian EFL learners?

For the purpose of answering research question one; fill-in-the-blank test was employed. The test consisted of 36 items. The respondents were instructed to supply only one preposition fitting the context in each sentence. The analysis of results of question one is based on percentage of language transfer errors. Table 10 below reveals the percentage of language transfer errors as well as the percentage of intralingual errors. Percentage of language transfer errors is used to answer research question one, whereas percentage of intalingual errors is used to answer research question two. To answer question one, it is fitting to have a look at the percentage of language transfer errors in Table 10 below.
**TABLE 10:** Proportion of language transfer errors and intralingual interference errors in fill-in-the-blank test.

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of language transfer errors</th>
<th>Percent of intralingual Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>16.3</td>
<td>83.7</td>
</tr>
<tr>
<td>2</td>
<td>46.2</td>
<td>53.8</td>
</tr>
<tr>
<td>3</td>
<td>19.1</td>
<td>80.9</td>
</tr>
<tr>
<td>4</td>
<td>68.5</td>
<td>31.5</td>
</tr>
<tr>
<td>5</td>
<td>82.1</td>
<td>17.9</td>
</tr>
<tr>
<td>6</td>
<td>11.9</td>
<td>88.1</td>
</tr>
<tr>
<td>7</td>
<td>78.0</td>
<td>22.0</td>
</tr>
<tr>
<td>8</td>
<td>6.8</td>
<td>93.2</td>
</tr>
<tr>
<td>9</td>
<td>55.5</td>
<td>44.5</td>
</tr>
<tr>
<td>10</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td>11</td>
<td>96.7</td>
<td>3.3</td>
</tr>
<tr>
<td>12</td>
<td>5.6</td>
<td>94.4</td>
</tr>
<tr>
<td>13</td>
<td>31.4</td>
<td>68.6</td>
</tr>
<tr>
<td>14</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td>15</td>
<td>58.8</td>
<td>41.2</td>
</tr>
<tr>
<td>16</td>
<td>6.2</td>
<td>93.8</td>
</tr>
<tr>
<td>17</td>
<td>13.2</td>
<td>86.8</td>
</tr>
<tr>
<td>18</td>
<td>16.6</td>
<td>83.4</td>
</tr>
<tr>
<td>19</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>20</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td>21</td>
<td>37.3</td>
<td>62.7</td>
</tr>
<tr>
<td>22</td>
<td>0.00</td>
<td>100</td>
</tr>
<tr>
<td>23</td>
<td>14.1</td>
<td>85.9</td>
</tr>
<tr>
<td>24</td>
<td>1.0</td>
<td>99.0</td>
</tr>
<tr>
<td>25</td>
<td>87.2</td>
<td>12.8</td>
</tr>
<tr>
<td>26</td>
<td>24.0</td>
<td>76.0</td>
</tr>
<tr>
<td>27</td>
<td>66.2</td>
<td>33.8</td>
</tr>
<tr>
<td>28</td>
<td>71.5</td>
<td>28.5</td>
</tr>
<tr>
<td>29</td>
<td>78.4</td>
<td>21.6</td>
</tr>
<tr>
<td>30</td>
<td>51.1</td>
<td>48.9</td>
</tr>
<tr>
<td>31</td>
<td>68.3</td>
<td>31.7</td>
</tr>
<tr>
<td>32</td>
<td>61.1</td>
<td>38.9</td>
</tr>
<tr>
<td>33</td>
<td>1.4</td>
<td>98.6</td>
</tr>
<tr>
<td>34</td>
<td>10.6</td>
<td>89.4</td>
</tr>
<tr>
<td>35</td>
<td>38.8</td>
<td>61.2</td>
</tr>
<tr>
<td>36</td>
<td>44.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Total</td>
<td>35.2</td>
<td>64.8</td>
</tr>
</tbody>
</table>

A close look at Table 10 shows that the highest percentage of errors attributable to transfer from Arabic (L1) is in item 11, scoring 96.7%. In contrast, the lowest percentage of errors ascribed to language transfer is in items 10, 14, 19, 20 and 22, scoring 0.00. Table 10 further reveals that the total percentage of errors resulting from negative Arabic transfer when
acquiring English prepositions is 35.2%. This implies that transfer from Arabic influences the acquisition of English prepositions, but it is not the chief factor responsible for the occurrence of errors committed in the use of English prepositions. These results do not deny the fact that Arabic language exerts an important influence on the acquisition of English prepositions. This is because 35.2% of errors can be traceable to transfer from Arabic, which is not a small proportion. These results bring to light the role of other factors work in close connection with language transfer when acquiring English prepositions; namely intralingual interference. The present study places its concentration on language transfer and intralingual interference as possible sources of errors since these two factors were categorized by Ritchards (1974) as the primary sources of the faulty usage of L2 structures. More details are mentioned on page 41. The role of intralingual interference is the subject matter of the subsequent research question.

The occurrence of transfer errors in the use of prepositions could be explained by two reasons. First, lack of target language knowledge. It is assumed that Jordanian EFL learners transfer the knowledge of their native language into L2 due to absence of the required knowledge of L2. Second, the differences between native language and target language. Differences between prepositions in English and Arabic are a leading factor to the occurrence of language transfer errors.

As indicated in Chapter Two on page 41 that when undertaking Error Analysis, respondents’ errors need to be classified into various categories namely; substitution, omission, addition and misordering. Following Error Analysis procedures, the researcher categorized the prepositional errors resulted from language transfer as shown in Table 11 below.
As demonstrated in Table 11, substitution errors form the vast majority of transfer errors made by Jordanian EFL learners with 58.8%. This implies that errors stem from replacing one preposition with another are the greatest among all other types. Moreover, omission errors where the respondents do not use a necessary preposition ranked second, scoring 22.8%. Addition errors came third constituting 18.4% of the total number of errors, meaning that errors where the respondents insert unnecessary preposition are the least among all types. The overuse of substitution errors can be explained by the fact that the respondents face difficulty in choosing the correct preposition much more than adding a necessary preposition or deleting unnecessary preposition. For instance, Castro (2013) examined the acquisition of English prepositions among Filipino college students. The researcher found that substitution errors were the majority among all other types of errors. The three examples below illustrate the occurrence of substitution, addition and omission errors. Example one is on substitution errors, two is on addition errors and three is on omission errors.

**TABLE 11:** Classification of language transfer errors in the use of English prepositions

<table>
<thead>
<tr>
<th>Error Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Substitution</td>
<td>58.8</td>
</tr>
<tr>
<td>Addition</td>
<td>18.4</td>
</tr>
<tr>
<td>Omission</td>
<td>22.8</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>
1- *The prime minister will go to California ___in____ the seventh of his month.

In sentence one the respondents wrongly substituted the preposition *in* for *on* as a result of transfer from L1.

2- *There is nothing more we can do here. Let us go__to____ home.

In sentence two the respondents mistakenly added the preposition *to*, where it is not required. This error is traceable to native language transfer.

3- *He loves watching James Bond films ________ Christmas Day.

In sentence three, the respondents wrongly did not provide any preposition as a result of L1 transfer. This because in Colloquial Arabic, days that mark particular occasions are not preceded by any preposition.

In conclusion, the results of research question one revealed that transfer from Arabic accounts for 35.2 % of errors made by Jordanian EFL learners when acquiring prepositions. The results also showed that substitution errors are the overwhelming majority among all types of errors with 58.8%. These figures indicate that Arabic language transfer influences the acquisition of English prepositions by Jordanian EFL learners. However, language transfer is not the main source of errors committed when acquiring English prepositions. In other words, language transfer works in tandem with other factors such as intralingual interference when acquiring these language structures. Thus, the findings of this question lent support to the moderate position, which proposes that errors committed by EFL learners are a reflection of both language transfer and intralingual interference. This paves the way to study the role of intralingual interference as will be shown in research question two below.
4.2 Intralingual interference in the acquisition of English prepositions

4.2.1 Research Question Two

Question 2- Does intralingual interference contribute to the errors when acquiring English preposition by Jordanian EFL learners?

The aforementioned fill-in-the-blank test was used to answer this question. The test contained 36 items and the respondents were involved to add only one preposition in the blank specified for each item. The results pertinent to this question are revealed in Table 10 on pages 134-135. Table 10 reveals the percentage of errors resulting from intralingual interference as well as the percentage of errors resulting from language transfer.

A quick glance at Table 10 on pages 134-135 displays that items 10, 14, 19, 20 and 22 show the highest percentage of errors caused by intralingual interference, scoring 100%. Table 10 further reveals that item 11 receives the lowest percentage of errors ascribed to intralingual interference, scoring 3.3%. The difference in percentage between the highest items and the lowest item is striking, reaching up to 96.7%. Table 10 further displays that the total percentage of errors attributed to intralingual interference is 64.8%. This suggests that intralingual interference contributes largely to the errors committed when acquiring English prepositions by Jordanian EFL learners. More precisely, intralingual interference is the major source of prepositional errors made by Jordanian EFL learners. For the purpose of determining whether the difference between intralingual errors and language transfer errors is statistically significant or not, t- test was employed. Table 12 below shows the results of t-test.
TABLE 12: Independent sample t-test.

<table>
<thead>
<tr>
<th>Source of errors</th>
<th>SD</th>
<th>T value</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language transfer</td>
<td>2.63107</td>
<td>-10.235</td>
<td>.000</td>
</tr>
<tr>
<td>Intralingual interference</td>
<td>4.95917</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P value refers to the least significant point at which the difference between variables is considered acceptable. Normally when the value of p is less than 0.05, the difference between variables is counted significant (Tran, 2010). While, t value is employed to compute the difference appears in the units of standard errors. The more value of t (it can be either negative or positive) the more significance difference is possibly to occur. The closer t value to zero the greater chance there is no a significant difference. Based on the results obtained from Table 12 above, there is a significant difference between language transfer errors and intralingual errors because p value is less than 0.05 (P= .000 <0.05).

In describing the errors made by the respondents in fill-in-the-blank test, intralingual errors were sorted into three types similar to those used in grouping transfer errors. These three types are substitution, omission and addition. For the sake of illustration, Table 13 below displays distribution of the three aforesaid types.
As demonstrated in Table 13 above, substitution errors are the largest among all types of intralingual errors scoring 57%. Omission errors ranked second, accounting for 39.4% of the total percentage of errors. The table additionally shows that addition errors are much less than the two formerly mentioned types, scoring only 3.6%. The high occurrence of substitution errors might be ascribed to two reasons. First, the cases where English and Arabic use prepositions to show a relationship between two entities in a sentence outnumbered the cases where no prepositions are needed. Therefore, substitution errors are expected to be the most common among all types of errors. Second, the respondents confronted a difficulty in selecting the right preposition more than deleting a necessary preposition or adding unnecessary preposition. The three examples below clarify instances of substitution, addition and omission intralingual errors. Example one is on substitution errors, two is on addition errors and three is no omission errors.

1- *Some trees usually lose their leaves ____ at____ autumn.
In sentence one the respondents mistakenly substituted the preposition *at* for *in*. This error is
deemed as intralingual because it results from difficulty in acquiring L2 itself.

2- *We have reached__at___ California after driving for two days.

Sentence two exhibits the case of addition errors, where the respondents wrongly added the
preposition *at*, despite the fact that it is not required.

3- *There has been a rise ______ the number of people out of work.

Sentence three illustrates the case of omission errors in which the respondents did not provide the
preposition *in*, where it is required.

In addition to the above mentioned classification of intralingual errors, namely; substitution, addition and omission. Intralingual errors can be further subdivided into four types according to their source. These four types are overgeneralization errors, ignorance of rule restrictions, incomplete application of rules and false concepts hypothesized. The aforesaid types of errors were analyzed in details on pages 41-42 in Chapter Two. It is not a simple task to categorize intralingual errors into the previously mentioned four types. This is consistent with Ellis, (1994) who states that identifying transfer and intralingual errors is not an easy task, and more difficult to distinguish between the four types of intralingual errors. For the sake of clarification, determining the occurrence of the aforesaid types of intralingual errors was based on the following four criteria.

1 – Overgeneralization errors: these errors were determined when the respondents generalized the use of one preposition to another. For instance, when a respondent used wrongly
the preposition *on* to express the spatial meaning of the preposition *in*, he over-generalized the use of *on* to *in* as saying *on Malaysia* instead of *in Malaysia*.

2- Ignorance of rules restrictions: these errors were determined when the respondents provided haphazard answers due to lack of knowledge of L2. This is best exhibited when producing a sentence like *there is a picture with the wall* instead of saying *there is a picture on the wall*.

3- Incomplete application of rules: these errors were determined in the event that the respondents did not provide any preposition to fill the blank with. This type of errors occurs as a result of producing incomplete structures of the target language as leaving a sentence blank e.g. *he broke the window ____ hammer*.

4- False concepts hypothesized: these errors were determined when the respondents failed to understand the distinction made in the target language between two structures. This occurs with the prepositions *in* and *at*, *since* and *for* as saying *at summer* instead of *in summer*.

Table 14 below displays the distribution of the four types of intralingual errors in the fill-in-the-blank test.

**TABLE 14:** Distribution of the four types of intralingual errors

<table>
<thead>
<tr>
<th>Type of error</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overgeneralization</td>
<td>11.12</td>
</tr>
<tr>
<td>Ignorance of rules restrictions</td>
<td>73.21</td>
</tr>
<tr>
<td>Incomplete application of rules</td>
<td>8.15</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
False concepts hypothesized 7.50
Total 100

As demonstrated in table 14 that ignorance of rules restrictions is the primary source of intralingual errors with a percentage of 73.21%. Overgeneralization ranked second with a percentage of 11.12%. Incomplete application of rules and false concepts hypothesized came third and fourth with a percentage, scoring respectively 8.15% and 7.50%. The high occurrence of errors attributable to ignorance of rules restrictions can be explained by saying that; it is expected that the respondents are unaware of the right use of English prepositions. Such ignorance of the right use is reflected in random and haphazard answers on the part of respondents. This confirms the fact that, English prepositions are extremely difficult for Jordanian EFL learners and mastering them is not a simple task.

The results of the second research question revealed that intralingual interference accounts for 64.8% of errors in the use of English prepositions. These results also show that substitution errors constitute the overwhelming majority among all types of intralingual errors, scoring 57%. Based on the results of question two, it could be said that intralingual interference contributes vastly to the errors made when acquiring English prepositions. In other words, the difficulties that the respondents in present study encounter when acquiring English prepositions stemmed from the nature of the target language itself more than transfer from native language. The high occurrence of intralingual errors can by justified by saying that, English prepositional system is highly complicated and constitutes a great learning difficulty for non-native speakers. This is in line with Galleguillos, (2013) who argued that English prepositions are very difficult to acquire due to the fact that they can express both idiomatic as well as physical meanings.
4.3 The most difficult usage of English prepositions to acquire

4.3.1 Research Question Three

Question 3: Which of the different usages of English prepositions is the most difficult for Jordanian EFL learners to acquire?

Determining the most difficult usage of prepositions for Jordanian EFL learners would help in raising the awareness of teachers and curriculum designers regarding this difficult usage and in turn finding remedial solutions for the benefits of EFL learners. For the purpose of answering research question three, the researcher employed the aforementioned fill-in-the-blank test. The test consisted of 36 sentences, in which six sentences were devoted for one usage of English prepositions. The distribution of sentences alongside the usages of prepositions that were investigated in this study is displayed in Table 15 below.

**TABLE 15:** Distribution of sentences and usages of prepositions in fill-in-the-blank test

<table>
<thead>
<tr>
<th>Items</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-6</td>
<td>Temporal usage</td>
</tr>
<tr>
<td>7-12</td>
<td>Spatial usage</td>
</tr>
<tr>
<td>13-18</td>
<td>Preposition combinations</td>
</tr>
<tr>
<td>19-24</td>
<td>Support and opposition</td>
</tr>
<tr>
<td>25-30</td>
<td>Instrument and manner</td>
</tr>
<tr>
<td>31-36</td>
<td>Cause and purpose</td>
</tr>
</tbody>
</table>
Having revealed the six usages of English prepositions that are included in this study, the beginning of discussion on the usages of prepositions will be with the temporal usage as displayed in Table 16 below. The errors and correct responses are presented in terms of percentage.

**Table 16: Proportion of errors in the temporal usage**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24.2</td>
<td>75.8</td>
</tr>
<tr>
<td>2</td>
<td>51.8</td>
<td>48.2</td>
</tr>
<tr>
<td>3</td>
<td>13.2</td>
<td>86.8</td>
</tr>
<tr>
<td>4</td>
<td>60.0</td>
<td>40.0</td>
</tr>
<tr>
<td>5</td>
<td>11.0</td>
<td>89.0</td>
</tr>
<tr>
<td>6</td>
<td>11.8</td>
<td>88.2</td>
</tr>
<tr>
<td>Total</td>
<td>28.6</td>
<td>71.3</td>
</tr>
</tbody>
</table>

A close examination for Table 16 reveals that the percentage of temporal errors ranges from the highest 60% in item 4 to the lowest 11.0% in item 5. The difference in percentage between the highest and lowest items is striking, reaching up to 49%. The total percentage of errors committed in the temporal usage is 28.6%, whereas the total percentage of correct responses is 71.3%. These results denote that the temporal usage of English prepositions does not constitute a great difficulty for Jordanian EFL learners due to the fact that the percentage of correct responses surpasses by far that of incorrect responses. As indicated earlier, the percentage of correct responses is 71.3, while the percentage of incorrect responses is 28.6. The next usage
to be analyzed is the spatial usage of English prepositions. The results pertinent to this particular usage of prepositions are depicted in Table 17 below.

**Table 17:** Proportion of errors in the spatial usage

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>71.5</td>
<td>28.5</td>
</tr>
<tr>
<td>8</td>
<td>29.0</td>
<td>71.0</td>
</tr>
<tr>
<td>9</td>
<td>69.6</td>
<td>30.4</td>
</tr>
<tr>
<td>10</td>
<td>29.9</td>
<td>70.1</td>
</tr>
<tr>
<td>11</td>
<td>67.6</td>
<td>32.4</td>
</tr>
<tr>
<td>12</td>
<td>20.3</td>
<td>79.7</td>
</tr>
<tr>
<td>Total</td>
<td>47.9</td>
<td>52.0</td>
</tr>
</tbody>
</table>

As demonstrated in Table 17 above, the percentage of errors in the spatial use is the highest in item 7, scoring 71.5%. Conversely, the lowest percentage of errors is in item 12, scoring 20.3%. The difference in percentage between item 7, the highest and item 12, the lowest is 51.2%. Table 17 further shows that the total percentage of errors made in this usage is 47.9%, whereas the total percentage of correct responses is 52.0%. These results indicate that the proportion of errors in the spatial usage is a bit less than the correct responses. It can be concluded that Jordanian EFL learners encounter a considerable amount of difficulties in acquiring English prepositions expressing spatial relationship. This can be explained by saying that prepositions that express spatial meaning are much in number and their meanings are
interrelated. Thus, there are slight differences in meaning between the many spatial prepositions, making their acquisition too difficult for non-native speakers of English.

Besides, preposition combinations were also analyzed (results in Table 18 below). The term preposition combinations is employed in referring to the prepositions that collocate with particular verbs, adjectives or nouns.

Table 18: Proportion of errors in preposition combinations

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>62.0</td>
<td>38.0</td>
</tr>
<tr>
<td>14</td>
<td>43.9</td>
<td>56.1</td>
</tr>
<tr>
<td>15</td>
<td>80.0</td>
<td>20</td>
</tr>
<tr>
<td>16</td>
<td>73.0</td>
<td>27</td>
</tr>
<tr>
<td>17</td>
<td>57.7</td>
<td>42.3</td>
</tr>
<tr>
<td>18</td>
<td>74.6</td>
<td>25.4</td>
</tr>
<tr>
<td>Total</td>
<td>65.2</td>
<td>34.8</td>
</tr>
</tbody>
</table>

A close look at Table 18 shows that the highest percentage of errors in preposition combinations is in item 15, scoring 80%. In contrast, the lowest percentage of errors is in item 14, scoring 43.9%. The difference in percentage between the highest item 15 and the lowest item 14 is 36.1%. Furthermore, the total percentage of errors in the use of preposition combinations is 65.2%, whereas the total percentage of correct responses is 34.8%. These results suggest that more than half of participants’ responses to the items of this usage are incorrect. Based on the figures obtained from Table 18, preposition combinations pose extreme difficulty for Jordanian
EFL learners. Most items of prepositions combination, excluding item 14, show high level of errors. The rates of errors in most items outnumbered by far the rates of correct responses. The large proportion of errors made by Jordanian EFL learners when acquiring preposition combinations can be explained by the saying that the use of preposition combinations is unpredictable and follow no logic. The process of acquiring this particular usage depends mainly on memorizing the preposition that co-occurs with certain verb, noun or adjective (Robinson, 2009). This is consistent with Grubic (2004, p. 16) who states “Many English verbs and adjectives occur with one and only one preposition. Such prepositions must be learned as an integral part of the verb or adjective (as part of the lexical unit”).

The next usage to be analyzed in this study is prepositions of support and opposition. Table 19 below shows the results pertinent to this particular usage.

**Table 19: Proportion of errors in prepositions of support and opposition**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>23.7</td>
<td>76.3</td>
</tr>
<tr>
<td>20</td>
<td>47.0</td>
<td>53.0</td>
</tr>
<tr>
<td>21</td>
<td>57.5</td>
<td>42.5</td>
</tr>
<tr>
<td>22</td>
<td>20.6</td>
<td>79.4</td>
</tr>
<tr>
<td>23</td>
<td>18</td>
<td>82.0</td>
</tr>
<tr>
<td>24</td>
<td>28.5</td>
<td>71.5</td>
</tr>
<tr>
<td>Total</td>
<td>32.55</td>
<td>67.45</td>
</tr>
</tbody>
</table>
Table 19 above reveals that item 21 receives the highest percentage of errors when using prepositions of support and opposition, scoring 57.5%. Conversely, item 23 has the lowest percentage of errors, scoring 18%. Moreover, the difference in percentage between the highest item and the lowest item is 39.5%. The total percentage of errors committed by the respondents when acquiring this particular usage is 32.55%. In contrast, the total percentage of correct responses is 67.45%. These results suggest that prepositions of support and opposition do not pose much difficulty for Jordanian EFL learners. Prepositions in English and Arabic when indicating support and opposition have much in common. Accordingly, similarities between the two prepositional systems play a facilitative role.

Table 20 below displays the results of the usage of prepositions of instruments and manner.

**Table 20: Proportion of errors in the use of prepositions of instruments and manner**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>68.5</td>
<td>31.5</td>
</tr>
<tr>
<td>26</td>
<td>78.6</td>
<td>21.4</td>
</tr>
<tr>
<td>27</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>28</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>29</td>
<td>78.3</td>
<td>21.7</td>
</tr>
<tr>
<td>30</td>
<td>63.9</td>
<td>36.1</td>
</tr>
<tr>
<td>Total</td>
<td>64.8</td>
<td>35.11</td>
</tr>
</tbody>
</table>
Based on the results obtained from Table 20, item 28 shows the highest percentage of errors when using prepositions of instruments and manner, scoring 80%. Conversely, item 27 receives the lowest percentage of errors, scoring 20%. The difference in percentage between the highest item 28 and the lowest item 27 is very tremendous, reaching up to 60%. Table 20 additionally indicates that the total percentage of errors that were made when acquiring prepositions of instruments and manner is 64.8%. Moreover, the total percentage of correct responses is 35.11%. These results imply that prepositions of instruments and manner are difficult to acquire by Jordanian EFL learners. The difficulty that the respondents encounter in acquiring this particular usage can be ascribed primarily to two reasons, 1- the differences between English and Arabic prepositions when expressing the notion of instruments and manner are huge. For instance, Arabic mostly uses the preposition *bi*, which is equivalent to the preposition *by* with tools and instruments. In contrast, English language utilizes the preposition *with* in accompany with tools.

2- Lack of knowledge on the part of the respondents with respect to right usage of prepositions of instruments and manner. The lack of knowledge is best manifested by providing haphazard answers by the respondents to the items of this particular usage. For instance, in answering a sentence like *we were received *----------* utmost respect and dignity*. Some respondents provided random answers such as adding the preposition *from* instead of with. This type of errors reflects mere ignorance of the correct usage of prepositions.

And finally the results of the usage of prepositions of cause and purpose are shown in Table 21.
Table 21: Proportion of errors in the use of prepositions of cause and purpose

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent of errors</th>
<th>Percent of correct responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>34.6</td>
<td>65.4</td>
</tr>
<tr>
<td>32</td>
<td>82.5</td>
<td>17.5</td>
</tr>
<tr>
<td>33</td>
<td>59.4</td>
<td>40.6</td>
</tr>
<tr>
<td>34</td>
<td>45.1</td>
<td>54.9</td>
</tr>
<tr>
<td>35</td>
<td>34.1</td>
<td>65.9</td>
</tr>
<tr>
<td>36</td>
<td>56.3</td>
<td>43.7</td>
</tr>
<tr>
<td>Total</td>
<td>52.0</td>
<td>48.0</td>
</tr>
</tbody>
</table>

Table 21 denotes that the percentage of errors in the use of prepositions of cause and purpose is the highest in item 32, scoring 82.5%. In contrast, the lowest percentage of errors is in item 35, scoring 34.1%. Furthermore, the difference in percentage between the highest item 32 and the lowest item 35 is 48.4%. Further examination of Table 21 shows that the total percentage of errors in this particular usage constitutes 52% of participants’ responses, while the total percentage of participants’ correct responses is 48%. These results suggest that the acquisition of prepositions expressing the notion of cause and purpose is not an easy task for Jordanian EFL learners. These inferences are supported by the results obtained from the participants’ responses, where the rate of errors constitutes approximately half of the total number of responses.

For the purpose of determining whether the difference among the six usages of English prepositions is statistically significant or not, one-way ANOVA was utilized. The results of one way ANOVA are presented in Table 22 below.
**TABLE 22:** P value and F value for the six usages of English prepositions

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>7242.096</td>
<td>5</td>
<td>1448.419</td>
<td>3.7144</td>
<td>0.009</td>
</tr>
<tr>
<td>Within groups</td>
<td>11698.35</td>
<td>30</td>
<td>389.945</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18940.45</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of Table 22 depicts that there is a statistical significant difference among the six usages of English prepositions. This is because the P value is less than 0.05 (F =3.7144, p=0.009< 0.05). These results confirm that the difference among the six usages of prepositions is real and existing.

Furthermore, in order to determine which usage of English prepositions is the most difficult for Jordanian EFL learners to acquire, it is of a paramount importance to have a look at Table 23 below.

**Table 23:** Descriptive statistics on the six usages of English prepositions

<table>
<thead>
<tr>
<th>Prepositional usage</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>95% confidence interval for mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Temporal usage</td>
<td>28.6</td>
<td>21.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Spatial usage</td>
<td>47.9</td>
<td>24.2</td>
<td>22.7</td>
</tr>
<tr>
<td>Preposition combinations</td>
<td>65.2</td>
<td>13.3</td>
<td>51.3</td>
</tr>
<tr>
<td>Prepositions of support and opposition</td>
<td>32.5</td>
<td>16</td>
<td>15.7</td>
</tr>
</tbody>
</table>
The analysis of Table 23 above reveals that the total mean of errors for the temporal usage is 28%. The total mean of errors for the spatial usage is 47.9%, whereas the total mean of errors for preposition combinations is 65.2%. Furthermore, the total mean of errors for prepositions of support and opposition scores 32.5%. The total mean of errors for prepositions of manner and instruments is 64.8%, while the total mean of errors for prepositions of cause and purpose scores 52%. These results indicate the preposition combinations is the most difficult usage of English prepositions for Jordanian EFL learners. This is because preposition combinations showed the highest proportion of errors scoring 65.2%.

4.4 The acquisition of preposition stranding and pied piping

4.4.1 Research Question Four

Question 4- Do the Jordanian EFL learners show preference toward pied-piping in interrogatives over preposition stranding due to the absence of preposition stranding from Arabic?

Using pied piping more than preposition stranding would provide further evidence for the facilitative role that Arabic plays in the acquisition of English as L2 as pied piping is licit in both Arabic and English. In contrast, using preposition stranding more than pied piping would lend support for other factors than language transfer such as salience. Moreover, producing equal
instances of pied piping and preposition stranding would indicate that both language transfer and salience factor interact together when acquiring these two language constructions.

With the aim of answering this research question, a grammaticality judgment and correction task was utilized. The task contained 21 sentences, 15 of which were incorrect due to absence of prepositions and 6 sentences were correct. The respondents were required to perform two tasks. 1- Judgment of the sentences in terms of grammaticality and meaningfulness. 2- Correcting the erroneous sentences by adding a preposition either at the beginning or at the end of the sentence. The results pertinent to research question four are displayed in Table 24 below. Table 24 depicts the proportion of preposition pied piping, preposition stranding and null prepositions in grammaticality judgment and correction task.

**TABLE 24**: Percentage of pied piping, preposition stranding and null prepositions.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preposition Pied piping</td>
<td>33.18</td>
</tr>
<tr>
<td>Preposition Stranding</td>
<td>31.38</td>
</tr>
<tr>
<td>Null Preposition</td>
<td>35.44</td>
</tr>
</tbody>
</table>

A close examination of the results of grammaticality judgment and correction task in Table 24 reveals that the instances of preposition pied piping produced by the respondents slightly outnumbered those of preposition stranding. The total percentage for the use of preposition pied piping amongst the respondents is 33.18%. The total percentage for the production of preposition stranding is 31.38%. In addition, the total percentage for the use of null preposition is 35.44%. Null prepositions phenomenon refers to the cases, where the respondents
had no preference toward using preposition stranding over pied piping or vice versa i.e. the respondents did not provide any preposition either at the beginning of the sentences or at the end of sentences. This suggests that the instances where the respondents did not provide any preposition surpassed instances of preposition stranding and pied piping. For the purpose of determining whether the difference in use between the three constructions; namely preposition stranding, pied piping and null prepositions is statistically significant or not, one-way ANOVA was employed. The results are presented in Table 25 below.

**TABLE 25**: One-way ANOVA for the use of pied piping, preposition stranding and null prepositions

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>Df</th>
<th>MS</th>
<th>F</th>
<th>P-value</th>
<th>F crit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>123.7658</td>
<td>2</td>
<td>61.88289</td>
<td>0.511743</td>
<td>0.603139</td>
<td>3.219942</td>
</tr>
<tr>
<td>Within Groups</td>
<td>5078.877</td>
<td>42</td>
<td>120.9257</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>5202.643</td>
<td>44</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to consider the difference between variables is significant, the P-value should be less than 0.05. The results of one-way ANOVA show that, there is no a statistical significant difference among the use of preposition stranding, pied piping and null prepositions by the respondents in this study. This is because the P-value is greater than 0.05 (p = 0.603139 > 0.05). Table 25 further shows that the respondents in this study did not show a significant preference toward pied piping in interrogatives over preposition stranding, but rather both constructions were produced on an equal footing, where no significant difference in use was found between the two constructions.
It was noted during the course of analyzing the responses to the items of grammaticality judgment and correction task that in some cases the respondents added the resumptive pronoun *it* after prepositions when composing a sentence on preposition stranding. This is presented in the two examples below.

1- *Which dog did Tom play with* *it*?

- ’aiu kalbin laciba Tom macahu?

2- *Which picture did her friends look at* *it*?

- ’aiu şoratin nasalara ’aşdiqa ’ uha ’ili ha

The addition of the resumptive pronoun *it* in the above examples one and two, which is equivalent to the pronouns (hu and ha) in Arabic, is a mere reflection of Arabic grammar. Arabic does not permit a sentence to end with a preposition without following it with a resumptive pronoun. On the contrary, in English when composing a sentence on preposition stranding, the preposition must be orphaned at the end of the sentence without any following object Rezai (2006). It could be said that transfer from mother tongue is always operating when there is a lack of exposure to second language patterns.

In short, the analysis of results of research question four indicates that the percentage of use for the two constructions was as follows; preposition pied piping accounts for 33.18% of responses, while preposition stranding accounts for 31.38% of responses. The results additionally reveal that the production of null preposition phenomenon constitutes 35.44% of participants’ total responses. Instances of null prepositions indicate that the respondents lack the subcategorization knowledge for the English verbs. Some of the respondents seem to be unaware
that some verbs in English require prepositions to complete their meanings. This is best exhibited in the fact that, they have not provided any preposition either at the end of the sentence or at the beginning of the sentence. Moreover, for the purpose of determining whether the difference in use between preposition pied piping, preposition stranding and null preposition is statistically significant or not, one-way ANOVA was utilized. The results of one-way ANOVA analysis indicate that the difference among the use of preposition stranding, pied piping and null preposition is not statistically significant. In addition, the respondents did not show significant difference between pied piping in interrogatives over preposition stranding but rather both constrictions were used equally.

The above mentioned results suggest that language transfer is not the only determining factor in acquisition of these two constructions, but rather there is another factor at play. This factor works hand in hand with language transfer in shaping the acquisition of pied piping and preposition stranding. To be more specific, the production of pied piping by the respondents provides evidence for positive transfer from Arabic because both English and Arabic allow pied piping, whereas the occurrence of preposition stranding in the language of the respondents could be attributed to salience factor. The term salience refers to “the availability of input” or receiving ample exposure to certain L2 structure (Gass and Selinker, 2008, p.145). It could be concluded that the close rates of the production of pied piping and preposition stranding among the respondents denote that language transfer and salience factor work in a close connection when acquiring these two language structures.
4.5 English proficiency levels and negative Arabic transfer

4.5.1 Research Question Five

Question 5- Are there any significant differences among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions?

Before revealing the results of one-way ANOVA regarding the statistical differences among the three groups of Jordanian EFL learners, it is fitting to elaborate and display the results of linearity test pertinent to this research question. Linearity refers to the mathematical relationship or function that can be graphically represented as a straight line as in two quantities that are directly proportional to each other. The straight line of a linear relationship is an indication of how closely the points in the scatter plots fit a straight line. If the points in the scatter plot lie exactly on the straight line, then there is a perfect linear relationship. If there is no fit at all, then there is no linear relationship (Powers, 2013). Furthermore, non-linear relationship means that the data cannot be summarized by one straight line.

For the purpose of research question five, linearity test was employed in order to measure the relationship between language transfer and English proficiency level. A close look at Chart 1 below shows that the points are placed close to the straight line, meaning that it seems there is a liner relationship between language transfer and L2 proficiency level. Chart 1 is depicted blow.
For the purpose of answering this research question, the researcher employed the aforementioned fill-in-the-blank test and a cloze test. The fill-in-the-blank test was used to examine negative Arabic transfer and any other accompanying factors such as intralingual interference in the acquisition of English prepositions. Cloze test was employed to help in classifying the respondents into three proficiency levels; namely, low, intermediate and advanced. The cloze test used in this study consisted of a prose text of a relative length. Thirty words were omitted from the text and the respondents were instructed to provide these missing words. In scoring the responses of cloze test, the respondent was given one point when providing the correct answer, while if the respondent provided wrong answer, he\she was given zero. The maximum possible score for this test was thirty. The analysis of results will start with presenting the results of cloze test. Then, the researcher will determine whether there are any significant differences between the three proficiency levels in terms of negative Arabic transfer when
Acquiring English prepositions. Table 26 depicts respondents’ classification according to cloze test.

**TABLE 26:** Classification of the respondents into three proficiency levels according to cloze test

<table>
<thead>
<tr>
<th>Proficiency level</th>
<th>Score</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low level</td>
<td>1-0</td>
<td>26.2</td>
</tr>
<tr>
<td>Intermediate level</td>
<td>11-20</td>
<td>42.5</td>
</tr>
<tr>
<td>Advanced level</td>
<td>21-30</td>
<td>31.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

Based on the results obtained from the cloze test, the respondents were classified as follows: low level scoring from 1-10, intermediate level scoring from 11-20 and advanced level scoring from 21-30. This method of classification is consistent with the method used by some researchers such as El-nabih (2010) who divided the respondents into three levels according to their scoring in the cloze test. Table 20 also shows that low level respondents account for 26.2% of the total number of respondents. The intermediate level respondents constitute 42.5% of the total number of respondents. The advanced level respondents account for 31.3%. These results indicate that the biggest portion of respondents fall under the intermediate level. These three proficiency levels were used together with the results obtained from fill-in-the-blank test in order to investigate whether there are any significant differences among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions.
It is argued that L2 proficiency level and transfer from native language interact in shaping the interlanguage of L2 learners (Kellerman, 1985; Nooshin, Behjat and Rostampour, 2014; Odlin, 1989). For the purpose of determining whether there are any statistical significant differences among the three proficiency levels with respect to language transfer errors, one-way ANOVA was employed. One-way ANOVA is usually used to assess any significant differences among mean scores obtained by two or more groups in a research study (Phakiti, 2014). In order to consider the difference between variables as significant, the p value must be under 0.05 (Tran, 2010). The value of P is depicted in Table 27 below.

**TABLE 27**: ANOVA results of Jordanian EFL learners according to proficiency levels.

<table>
<thead>
<tr>
<th></th>
<th>Sum of squares</th>
<th>Df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2.119</td>
<td>2</td>
<td>1.100</td>
<td>.135</td>
<td>.859</td>
</tr>
<tr>
<td>Within groups</td>
<td>2724.751</td>
<td>378</td>
<td>7.208</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2726.950</td>
<td>380</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As demonstrated in Table 27 that the p value is greater than 0.05 (F =.135, p=.859 >0.05). This suggests that, there is no statistical significant difference among the low, intermediate and advanced Jordanian EFL learners in terms of negative transfer from Arabic when acquiring English prepositions. In other words, all the respondents regardless of their English proficiency level relied equally on their native language when acquiring English prepositions.
The results of this research question suggest that, there are two important issues related to the acquisition of prepositions in particular and L2 structures in general need to be taken into account. First, language transfer takes place irrespective of the proficiency level of L2 learners. More specifically, language transfer is a strategy by which L2 learners at different proficiency levels attempting to get their message through. This is best manifested by the fact that all the respondents in this study irrespective of their proficiency level resorted to the knowledge of their first language. Second, it is not easy for L2 learners to overcome or get rid of remnants of native language when acquiring L2. The influence that result from mother tongue last for long time and can be evident even in the language of native-like or near native learners. With reference to the current study, it could be said that because the vast majority of the respondents in this study are homogenous in terms of educational and cultural backgrounds and have limited English language exposure, there is no significant differences among the low, intermediate and advanced Jordanian EFL learners with respect to language transfer errors when acquiring English prepositions.

4.6 Gender and negative Arabic transfer

4.6.1 Research Question Six

Question 6- Are there any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions?

Prior to revealing the results of t-test with respect to the differences between Jordanian males and females in terms of negative Arabic transfer, it is appropriate to report on linearity test that was conducted for the purpose of this research question. Linearity is defined as the ability to produce the input characteristics symmetrically and linearly. Linear relationship is best expressed by the closeness of points to the straight line. That is, the closest the points to the straight line,
the more probability to conclude that there is a linear relationship. In contrast, the farthest the points from the straight line the less probability to conclude that there is a linear relationship. For the purpose of research question six, linearity test was used to measure the relationship between gender and language transfer. A close look at Chart 2 below shows that it seems there is a linear relationship between language transfer and gender. This is because the points are placed close to the straight line. Chart 2 is shown blow.

![Chart 2](chart2.png)

The aforementioned fill-in-the-blank test was utilized in order to answer research question six. Negative Arabic transfer errors committed by males were compared to those made females in order to answer this research question. For the purpose of determining whether there is a statistical significant difference between males and females in terms of negative Arabic transfer, the researcher employed independent sample t-test as shown in Table 28 below.
As demonstrated in Table 28 the significance value is greater than 0.05 (p=0.127 > 0.05), meaning that there is no statistical significant difference between Jordanian EFL males and females in terms of negative Arabic transfer when acquiring English prepositions. Errors pertinent to language transfer are not differentiated by gender.

### 4.7 Summary

This chapter revealed the results of the six research questions posed in the present study. Three measurement instruments were designed for the purpose of gaining data from the respondents i.e. fill-in-the-blank test, grammaticality judgment and correction task and cloze test. Fill-in-blank test was employed to answer research questions; one, two, three, five and six. Grammaticality judgment and correction task was designed to answer research question four, and cloze test helped in answering question five. The main results pertinent to each research question are as below.

For research question one: The analysis of results revealed that transfer from native language (Arabic) accounts for 35.2 % of the total percentage of errors committed by Jordanian EFL
learners when acquiring English prepositions. These results indicate that negative Arabic transfer influences the acquisition of English prepositions but it is not the most determining factor in the acquisition of English prepositions. The results further show that substitution errors constitute the highest proportion of language transfer errors followed by omission errors and addition errors respectively.

For research question two: The results showed that intralingual interference contributes immensely to the errors in the acquisition of English prepositions. Thus, intralingual interference is the main source of errors made by the respondents when acquiring English prepositions, scoring 64.8%. These results imply that intralingual interference is the most operating factor in the acquisition of English preposition. The results additionally depict that substitution errors were the highest among all types of intralingual errors, followed by omission errors, and addition errors ranked last.

For research question three: The results displayed that preposition combinations are the most difficult usage to acquire by Jordanian EFL learners, followed closely behind by prepositions of instruments and manner. The results also show that prepositions of cause and purpose and the spatial usage of prepositions ranked third and fourth respectively based on the level of difficulty. Preposition of support and opposition came fifth, while the temporal usage of English prepositions came last.

For research question four, the analysis of results revealed that Jordanian EFL learners did not show apparent preference toward pied piping in interrogatives over preposition stranding. The respondents produced nearly equal rates of pied piping and preposition stranding in interrogatives. The results related to this question additionally showed that the respondents
manifested a strong evidence of null preposition phenomenon, in which in many cases the respondents never added any preposition neither at the end of the sentence nor at the beginning.

For research question five: The results indicated that there is no statistical significant difference between, the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions. The results revealed that the respondents resorted to the knowledge of their native language equally regardless of their proficiency levels.

For research question six: The results showed that there is no significant difference between Jordanian EFL males and females in terms of negative Arabic transfer when acquiring English prepositions.
5. **Introduction**

The primary purpose of the present study is to investigate Arabic language transfer in the acquisition of English prepositions by Jordanian EFL learners. This particular chapter reports the conclusion derived from the study. Thus, this chapter begins with discussion of the findings i.e. a brief review of the findings of the study based on the six research questions put forward by the study. In addition, the results are discussed with reference to the results of some previous studies that were conducted on the role of language transfer and the acquisition of English prepositions. Following that, contributions of the study and implications of the study are reported. Finally, suggestions for future research and summary are presented.

5.1 **Discussion of results**

This section starts out with reviewing the results related to research question one and concludes with the results of question six. The results are discussed with reference to some previous studies implemented within the scope of language transfer and English prepositions.

5.1.1 **Negative transfer from Arabic in the acquisition of English prepositions**

Question 1- Does negative Arabic transfer influence the acquisition of English prepositions by Jordanian EFL learners?

For the purpose of answering this question, fill-in-the-blank test was used. The results relevant to question one showed that, language transfer influences the acquisition of English prepositions but it is not the main factor at work. The results of this question additionally
revealed that, substitution errors constituted the largest portion of language transfer errors, followed respectively by omission and addition errors.

The results indicate that, more than one third of errors committed in the use of English prepositions are attributable to negative transfer from Arabic. These results confirm the fact that resorting to native language is inevitable for EFL learners when lacking the sufficient knowledge of L2. In light of the above mentioned results, it could be said that negative Arabic transfer influences the acquisition of English prepositions by Jordanian EFL learners. The occurrence of transfer errors in this study can be in part explained by what Schachter (1983) termed as “hypothesis testing process”. Schachter (1983) argues that EFL learners propose some hypotheses and test them based on the input they have received. She adds that transfer errors take place when EFL learners correctly equate the structures of the native language and the target language but mistakenly proposing a hypothesis that is suitable for the L1 but not for L2.

The adoption of hypothesis testing process in this study is best exhibited in the following two examples; 1- the use of the preposition *in* instead of *on* when talking about days and dates. Generally speaking, Jordanian EFL learners correctly equated the English preposition *in* with its Arabic counterpart *fii*, but wrongly hypothesized that the preposition *in* is used with week days. The use of *fii* with week days is correct in Arabic but not in English. 2- The adoption of hypothesis testing process is also manifested in the use of the preposition *by* instead of *with*. It seems that the respondents correctly perceived the English preposition *by* and the Arabic preposition *bi* as similar. However, they incorrectly hypothesized that *by* is used with instruments and tools as in the following sentence *“the baby eats his soup by a spoon”*. The use of *by* (*bi*) to express the notion of instruments is more appropriate to Arabic than English.
Another possible explanation for the occurrence of transfer errors is lack of L2 knowledge on the part of the respondents. More precisely, it is assumed that, the respondents were not well aware of the right use of some prepositions, therefore they resorted to the knowledge of their native language in order to fill gap in language. This gap filling process was described by Krashen (1983, cited in Odlin, 1989, p. 26) as ‘padding’. Krashen states that “Transfer… can still be regarded as padding, or the result of falling back on old knowledge, the L1 rule, when new knowledge … is lacking. Its cause may simply be having to talk before ready, before the necessary rule has been acquired”.

The results of research question one support the moderate position that was mentioned in Chapter One on page 4. The moderate position was proposed by some linguists such as Ellis (1986) and Odlin (1989) in order to make a compromise between the proponents of intralingual interference (Bailey, Madden & Krashen 1974; Dulay & Burt, 1973, 1974, 1975; Fathman, 1975) and the advocates of language transfer (Fries, 1957; Gass & Silenker 1992; Lado, 1957; Odlin, 1989). The moderate position states that, both language transfer and intralingual interference work in tandem in shaping the structures of L2. In other words, errors committed by EFL speakers are regarded as a reflection of both language transfer and intralingual interference. The results of research question one revealed that language transfer is not the only factor influencing the acquisition of English prepositions. Language transfer interacts with another factor; namely intralingual interference in forming the acquisition process of prepositions. This can be deemed as evidence supporting the moderate position.

The findings of research question one showed fewer rates of transfer errors than previous studies conducted on the acquisition of English prepositions among Arab learners of English (Asma, 2010; Habash, 1982; Tahaineh, 2010). For example, Habash (1982) and Tahaineh (2010)
investigated the use of English prepositions by Arab EFL learners. Based on the findings of the two studies, the researchers came to the conclusion that errors traceable to transfer from Arabic outnumbered by far those resulted from intralingual interference. The differences between the findings of the present study and the previous studies (e.g. Habash 1982; Tahaineh, 2010) could be attributed to two main causes. 1- For Habash’s study, all the respondents were school students and have not achieved good proficiency level at English. Therefore, they would commit much transfer errors due to their low proficiency level. This is in line with (Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013) who pointed out that, transfer errors are more apparent among EFL learners who have low proficiency level. 2- For Tahaineh’s study, the test that was used by the researcher played a major role in the occurrence of language transfer errors. In his study, Tahaineh (2010) used free composition test to measure errors made by the respondents. Composition tests normally motivate the respondents to generate full sentences not only supplying one word like fill-in-the-blank test or multiple choice test. Therefore, the more the respondents produce sentences in the target language the more errors will be committed. Thus, the quantity of errors related to language transfer would be huge.

For the purpose of analyzing thoroughly the respondents’ errors caused by language transfer when acquiring English prepositions, a sample of participants’ responses in fill-in-the-blank test will be discussed in the section below.

5.1.1.1 An analysis of language transfer errors

Transfer errors were classified into the following three types; substitution, omission and addition. And then the errors committed by the respondents were discussed in terms of their cause and the way in which they occurred. Such analysis of errors was necessary so as to
understand better how errors are committed when using English prepositions, which in turn helps in identifying the areas of difficulties that the EFL speakers encounter in these language structures. More details on the analysis of language transfer errors are mentioned on pages 41.

5.1.1.1 Substitution errors

This type of errors is characterized by selecting the wrong preposition or misplacement of a preposition. The sample of participants’ responses below shows instances of substitution errors such as the use of *from* in place of *with*, *to* in place of *at*, *by* in place of *with*, and *on* instead of *at*, *to*.

From *instead of* with

(1)* I am very angry __from_____ my friends for letting me down at the last moment.

The above example shows an evidence of native language influence. The respondents used the preposition *from* instead of *with* because in Arabic the preposition *min*, which corresponds to *from* is always accompanied with the adjective *angry* (ghadib), while in English *with* is used with the adjective *angry*.

To *instead of* At

(2)* The hunter aimed his gun carefully ____to____ the gazelle.

In sentence 2, the respondents used the preposition *to* instead of *at* as a consequence of transfer from native language. In Arabic the preposition *ʔla* which is equivalent to the preposition *to* is normally used to express the notion of purpose. While in English the preposition *at* is utilized to indicate purpose.

By *instead of* with
(3)* The baby eats his soup __by___ a spoon.

(4)* The thieves broke the window of school __by__ a hammer.

(5)* We were received __by__ utmost respect and dignity.

In sentences 3 and 4, the respondents used the preposition by in place of with because they are influenced by their mother tongue. In Arabic the preposition bi, which is equivalent to by, is normally used to indicate instruments, whereas English uses with to denote instruments or tools. Again, in sentence 5 the participants employed the preposition by in place of with as a result of transfer from Arabic. More specifically, in Arabic the preposition bi (by) is used to express manner, while in English the preposition with is most commonly used to indicate manner Alayesh (2012). In a similar manner, Tahaineh (2010) argues that Arab speakers of English erroneously use the preposition by instead of with due to the impact of native language.

On instead of At and To

6- *She looks stupid with this haircut. Everybody will laugh __on__ her.

7- *He had become accustomed __on__ living without electricity.

In sentence 6, the respondents erroneously selected the preposition on instead of at due to interference from Arabic. In Arabic a verb like laugh (yadhaku) always collocates with the preposition cala, which is equivalent to the English preposition on, whereas in English laugh is normally accompanied with the preposition at. This is in line with Tahaineh (2010) who found out that the participants in his study used the preposition on in place of at as a consequence of negative transfer from L1. In sentence 7 the respondents replaced the preposition to with on as a consequence of transfer from Arabic. In Arabic the adjective accustomed (moctaad) is always
accompanied with the preposition cala (*on*), while English requires the preposition *to* in order to accompany the adjective *accustomed*. Such influences of native language result mainly from the differences in use between prepositions in English and Arabic.

### 5.1.1.1.2 Omission errors

Omission errors require the participants to delete a necessary preposition. The illustrative examples below show instances of omission errors, where Ø is used instead of *on*, and *for*.

Ø instead of *on* and *for*

8) *He loves watching James Bond films ___ Ø___ Christmas day.*

9)* Everyone in the class has voted ___ Ø___ Mary to be the class monitor.

In sentence 8 the effect of Arabic is evident, where the respondents selected Ø instead of the preposition *on*. More precisely, in Arabic the use of any preposition with days that mark particular occasions such as Christmas day or birthday is not obligatory. In contrast, in English days like Christmas day or birthday should be preceded by the preposition *on*. In a similar vein, in sentence 9 the effect of mother tongue is still operating, where the participants mistakenly selected Ø instead of the preposition *for*. This can be justified by the fact that in Arabic the verb *voted* (*?ntakhaba*) does not collocate with any preposition.
5.1.1.3 Addition errors

This type of errors involves L2 learners to insert a preposition, where it is not needed. This is best exhibited in the use of the preposition *to* in place of Ø as elucidated in the examples below.

To instead of Ø

10) *There is nothing more we can do here. Let us go __to__ home.

11) *We have reached __to__ California after driving for two hours.

In sentence 10 above, the use of the preposition *to* instead of Ø is an indication that the respondents are influenced by their native language. In Arabic, when indicating a destination to home the preposition (ʔla), which is equivalent to (to) must be used. However, in English the situation is totally different where the noun *home* must not be preceded by *to*. This is in line with Lall, (2011) who argues that native speakers in English never place the preposition *to* before the noun *home*. In sentence 11, the participants utilized the knowledge of their mother language when selected the preposition *to* in place of Ø because in Arabic the verb *reach* (yaselu) must be followed by the preposition (ʔla) *to*. Conversely, in English the verb *reach* must not be accompanied with any preposition. In her study on the acquisition of English prepositions, Asma (2010) noticed that some of the respondents added the preposition *to* where no preposition is involved. She attributed such erroneous use to L1 negative transfer.
5.1.2 Intralingual interference in the acquisition of English preposition

Question 2- Does intralingual interference contribute to the errors in the acquisition of English preposition by Jordanian EFL learners?

Intralingual interference is defined as “items produced by the learner which reflect not the structures of L1, but generalizations based on partial exposure to the L2” (Husain & Idris, 2010, p. 465). The results of the second research question indicated that intralingual interference contributes largely to the errors in the use of English prepositions by Jordanian EFL learners. In other words, intralingual interference is the most influential factor in the acquisition of English prepositions, where the erroneous use of English prepositions resulted chiefly from complexities in the English prepositional system itself more than native language transfer.

Besides, the results of question two showed that substitution errors were the overwhelming majority among all types of intralingual errors. Omission errors came second, while addition errors ranked third with regard to the proportion of intralingual errors. These results are consistent with the results of Castro (2013) who found that substitution errors constituted the majority of errors in the use of prepositions, scoring 62%. The results of research question two additionally depicted that ignorance of rules restrictions is the primary source of intralingual errors. The use of overgeneralization came in the second place. Incomplete application of rules and false concepts hypothesized ranked third and fourth respectively. The dominance of ignorance of rules restrictions over the other types of intralingual errors indicate that the respondents were uncertain about which preposition to use. Such uncertainty stems mainly from lack of knowledge regarding the correct use of English prepositions. This is
evidenced by the fact that many respondents provided random or irrelevant answers to the items of fill-in-the-blank test. For instance, in answering the following item

- There were some beautiful pictures _______ the walls of the sitting room.

Some respondents used the preposition *in* instead of *on*. Providing the preposition *in* in this sentence reflects a mere ignorance of the right usage of this preposition, because *in* is normally used to indicate containment or enclosure within particular area but not indicating something over another object. Moreover, the results of the second research question revealed that there is a statistical significant difference between language transfer errors and intralingual errors (P= .000 <0.05). Determining the statistical significant difference between two variables makes the results of the study more reliable in which it informs the researcher that the difference between two variables is real and was not incidentally attained. As for the current study, statistical significance test indicated that the difference between language transfer errors and intralingual errors is real and does exist.

The high production of intralingual errors in the acquisition of English prepositions by Jordanian EFL learners can be explained by difficulty in the English prepositional system itself. English prepositions pose great learning difficulty for EFL learners, because they perform various functions such as accompanying different parts of speech to indicate novel meanings or functioning as adjunct in a sentence (Inezan & Najim, 2010). The difficulty of English prepositional system was confirmed by Asma (2010) who argued that Arab Algerian EFL learners face serious problems in their use of English prepositions. Similarly, Al-Hassan, (2013)
contended that English prepositions are an area of language where Jordanian EFL learners encounter great learning difficulties. Therefore, the difficulty of English prepositions is a leading factor for the high emergence of intralingual errors. Another source of difficulty is that, English prepositions are much in number and the meaning of many prepositions is interrelated with slight differences, which may not be noticed by most of EFL learners. Pairs of prepositions such as *in* and *at*, *to* and *for* are good examples on prepositions causing trouble to EFL learners due to little meaning differences.

The results of this research question are consistent with the results of some previous studies conducted on the acquisition of different L2 structures including prepositions (Bataineh, 2005; Castro, 2013; Kim, 1987; Sabzalipour, 2012; Sattayatham & Honsa, 2007). These studies arrived at the conclusion that errors made by EFL learners are mostly attributable to intralingual interference rather than transfer from mother tongue. Ellis (2008, cited in Wiertelak and Pawlak, 2012.) stated that, the majority of errors in the speech of EFL learners are caused by intralingual interference but not transfer from native language. The results of question two seem to oppose the results of other studies (Chelli, 2013; Delija and Koruti, 2013; Habash 1982; Jiang; 1995; Tahaineh, 2010). The above mentioned studies indicated that language transfer plays more influential role than intralingual interference in the acquisition of English as L2.

For the purpose of gaining more insight into the nature of intralingual errors made by the respondents, a sample of participants’ responses in fill-in-the-blank test is discussed thoroughly below.
5.1.2.1 An analysis of intralingual errors

In analyzing intralingual errors, two steps were taken. First, grouping these errors according to one of these three categories; substitution, omission and addition. Second, attributing the cause of errors to one of the following four types of intralingual errors; namely overgeneralization errors, ignorance of rules restriction, incomplete application of the rules and false concept hypothesized. More details on the classifications of intralingual errors are mentioned on pages 41.

5.1.2.1.1 Substitution errors

The illustrative sentences below display cases of substitution errors, where the respondents used the preposition, *at* in place of *in*, *to* in place of *for*, *of* in place of *in* and *in* in place of *on.*

At instead of *in*

13- *Some trees usually lose their leaves __at__ autumn.

14- *We came to England__at__ 1974 and have lived there since then.

15- *There is a big olive tree__at__ the middle of the garden.

Errors in sentences 13, 14 and 15 do not stem from native language transfer; they are all intralingual errors. The errors in these sentences can be ascribed to false concept hypothesized. More precisely, the respondents failed to understand the distinction in the target language between *in* and *at* due to perceived similarity in meaning between the two prepositions. With reference to sentences 13 and 14, the preposition *in* is normally used with seasons and years but it appears that the respondents confused *in* with *at* due to the different temporal usages of *at.* In sentence 15, the respondents perhaps were not able to make clear cut distinction between *in* and
at due to the fact that the two prepositions are interrelated when expressing spatial meaning. These results are consistent with Tahaineh’s (2010) who stated that Arab EFL speakers confused the preposition at with in. He attributed such confusion to uncertainty in the mind of EFL speakers regarding which preposition must be used, particularly when one preposition indicates many relationships.

To instead of for

16- *Everyone in the class has voted __to__ Mary to be the class monitor.

17- *The man worked very hard __to __ the good of his family.

18-*Edward is going into the shop __to__ some cigarettes.

The error in sentence 16 is committed due to false concept hypothesized. It appears that the respondents were unaware of the distinction in the target language between the prepositions to and for. Similarly, errors in sentences 17 and 18 are also caused by false concept hypothesized. Both to and for are used to express the idea of reason; to must be followed a verb, while for by a noun. It is expected that the respondents have thought that the two prepositions can be used in English interchangeably. In her study on English prepositions, Habash (1982) noticed that the participants kept confusing the preposition to with for as a consequence of perceived similarity between the two prepositions.

Of instead of in

19- *The minister’s participation __of__ the summit is seen important to its success.

The error of replacing the preposition in with of in sentence 19 is committed as a result of ignorance of rule restriction. The respondents do not know that the noun participation is
normally accompanied with the preposition *in* not *of*. Robinson (2009) argued that prepositions that combine with particular verb, noun and adjective express unpredictable meaning. Thus, there are no clear-cut rules to acquire these prepositions by L2 speakers, making their usage highly difficult to master.

In instead of *on*

20*There were some beautiful pictures __in__ the walls of the sitting room.

The error in sentence 20 was made due to ignorance of rule restriction. It seems the respondents do not know that the preposition *on* is used to describe something in contact with or over another object, while *in* is used to indicate position or enclosure within particular place, area or object. Therefore the use of *in* in this sentence is inappropriate. Acquiring spatial prepositions in English language is not an easy task for EFL speakers. This can be traced back to the fact that English prepositions, particularly *in*, *on* and *at* can express overlapping spatial meanings (Fion, 2005). This is in line with Fion (2005) who argues that the cognitive process that requires learning the spatial prepositions *in*, *on* and *at* is not easy.

5.1.2.1.2 Omission errors

The sentences fall under this type of errors are best exhibited in the use of Ø instead of the preposition *in* and Ø instead of *from* as shown below.

Ø instead of *in*

21-*He almost died when he fell__ Ø__ the river last night.

22-*I cried__ Ø__ pain because I hurt my knee by accident yesterday.
The girl shouted __ Ø__ despair when she heard the bad news.

Errors in sentences 21, 22 and 23 were caused by incomplete application of the rules. To be more specific, the respondents produced such malformed sentences in order to simplify the meaning of these sentences. In his analysis of errors made in the use of English prepositions, Tahaineh (2010) revealed instances where the participants used Ø instead of the prepositions in, of and to. He attributed some of these errors to interference from mother tongue on one hand and to the adoption of simplification strategy by the EFL learners on the other hand. Moreover, Asma (2010) investigated the acquisition of prepositions by Algerian EFL learners. She found that the participants used Ø instead of the preposition in. These errors reflect the fact that prepositions pose great learning problem for EFL learners.

Ø instead of from

24- *We have certainly benefited __ Ø__ the changes in law.

25-*The survivors were weak __ Ø__ lack of food and tiredness.

26-* The man died __ Ø__ an overdose of drugs three weeks ago.

Errors committed in sentences 24, 25 and 26 are caused by incomplete application of rules. The use of Ø in place of from in these sentences indicates that the respondents attempted at simplifying the meaning of the sentences by omitting a necessary element which is the preposition from. Tahaineh (2010) argued that the use of Ø where a preposition is involved can be explained by adoption of simplification strategy on the part of the respondents. He adds that simplification strategy could be responsible for the occurrence of a great portion of errors.
5.1.2.1.3 Addition errors

This type of intralingual errors is characterized by the use of the preposition *at* in place of Ø as revealed in the following sentences.

*At* instead of Ø

27- *There is nothing to do more here. Let us go __*at__ home.*

28- *We finally reached __*at__ the cost after five days sailing.*

The use of the preposition *at* in place of Ø in sentences 27 and 28 can be attributed to ignorance of rule restrictions. With reference to sentence 27, it is anticipated that the respondents did not know that the noun *home* must not be preceded by any a preposition when expressing the notion of destination. In sentence 28, the respondent were unaware that the verb *reach* does not collocate with any preposition. These results go with Asma’s (2010) results who noticed that the respondents in her study used the preposition *at* where it is not needed. She added that in a sentence like *I went home happily,* some participants provided the preposition *at* instead of Ø.

5.1.3 The most difficult usage of English prepositions to acquire

Question 3: Which of the different usages of English prepositions is the most difficult for Jordanian EFL learners to acquire?

In a bid to answer this research question, fill-in-the-blank test was used. As mentioned earlier, the test contained 36 items in which every six items were devoted for one usage of English prepositions. In total, six usages of prepositions were included in this particular study,
that is, the temporal usage, the spatial usage, preposition combinations, prepositions of support
and opposition, prepositions of instruments and manner and prepositions of cause and purpose.
The analysis of results for research question three revealed that preposition combinations was
found to be the most difficult usage to acquire by Jordanian EFL learners. The second difficult
usage was prepositions of instruments and manner. Prepositions of cause and purpose, and the
spatial usage ranked third and fourth. Prepositions of support and opposition, and the temporal
usage came fifth and sixth respectively. For the purpose of determining whether the difference
among the six usages of prepositions is statistically significant or not, one-ANOVA was used.
The results of one-way ANOVA revealed that there is a statistical significant difference among
the six usages of prepositions (p= 0.009< 0.05).

The difficulty that Jordanian EFL learners encountered in their use of preposition
combinations could be due to the fact that, the use of preposition combinations in English and
Arabic is disparate to a great extent. One aspect of the differences between preposition
combinations in English and Arabic is illustrated in the following two examples from fill-in-the-
blank test.
1- She looks stupid with this haircut. Everybody will laugh ______her.
2- I am very angry ______ my friends for letting me down at the last moment.

In answering item 1 above, some respondents provided the preposition on instead of at. The
erroneous use of on in this sentence stems from the differences between English and Arabic.
In English the verb laugh is always followed by the preposition at. In contrast, Arabic uses the
preposition Sala (on) after laugh. In item 2, it was noticed that some respondents added the
preposition *from* in place of *with*. Again, this error results from the differences between the two languages. English requires the preposition *with* to accompany the verb *angry*, while Arabic utilizes the preposition *from* with the verb *angry*. Another aspect of the differences between preposition combinations in English and Arabic is that, in English different prepositions can collocate with the same word to denote several meanings. For instance, *concerned about* means *worried*, whereas *concerned in* means *involved in*. In a similar vein, *angry with* is always used with people, while *angry about* is used with things. With respect to Arabic, this is not always the case. More precisely, in Arabic using one preposition instead of another with the same word does not always carry distinction in meaning.

It could be said that prepositions that pair with specific noun, verb and adjective are unpredictable and their meaning is highly idiomatic. There are no rules or reasonable basis that the Jordanian EFL learners can depend on when acquiring prepositions combinations, making their use too difficult. According to Grubic (2004) preposition combinations must be acquired by heart as integral part of the words they accompany with. Ritchie (2013) expresses the problems that EFL learners confront when using preposition combinations by saying that native speakers can use and understand preposition combinations because they have acquired them subconsciously. In contrast, this particular use of prepositions is highly troublesome for non-native speakers of English. It can be concluded that, the differences between English and Arabic are the main factor responsible for the high production of errors in the use of preposition combinations.
5.1.4 The acquisition of preposition stranding and pied piping

Question 4- Do the Jordanian EFL learners show preference toward pied-piping in interrogatives over preposition stranding due to the absence of preposition stranding from Arabic?

For the purpose of answering research question four, the researcher employed grammaticality judgment and correction task. The task contained 21 items, 15 of which were incorrect due to absence of prepositions and 6 were correct. The respondents were instructed to add the missing preposition either at the beginning of the sentence or at the end. Inserting a preposition at the beginning was counted as pied piping, whereas adding a preposition at the end of the sentence was considered as preposition stranding. The results of this research question revealed approximate rates of production for both pied piping and preposition stranding. In addition, the results indicated that null preposition phenomenon was commonly utilized by the respondents. In order to investigate whether the difference between the use of preposition stranding and pied piping and null prepositions is statistically significant or not, the researcher used one-way ANOVA. The results denoted that, there is no statistical significant difference among the use of preposition stranding, pied piping and null prepositions because the p value is greater than 0.05 (p = 0.603139 > 0.05). These results further revealed that, Jordanian EFL learners did not show preference toward pied piping over preposition stranding but the two constructions were used approximately at equal rates.

The equal production of pied piping and preposition stranding by Jordanian EFL learners could be due to the fact that both language transfer and salience factor are operative in the acquisition of these two language constructions. Salience can be defined as the “availability of
input” Gass and Selinker (2008, p. 145). In addition, Van Patten and Benati (2010) argued that, salience is the degree to which a particular grammatical structure attracts the attention of EFL learners. The high instances of preposition stranding produced by the respondents can be explained by salience factor. More specifically, because the respondents in this study have been abundantly exposed to preposition stranding when acquiring English as L2, their production of this item was high. The production of preposition stranding by Jordanian EFL learners cannot be attributed to transfer from native language because preposition standing does not exist in Arabic. Therefore, salience would be the best explanation for the occurrence of preposition stranding. In contrast, the production of pied piping in this study can be traceable to positive transfer from native language because both English and Arabic permit this language construction. The results pertinent to research question four do not play down the role of transfer from native language in favour of salience factor or vice versa because the use of the two constructions was quite close to each other. It can be concluded that both salience and language transfer are determining factors in the acquisition of preposition stranding and pied piping.

The results of previous studies conducted on the acquisition of preposition stranding and pied piping showed conflicting findings. Some studies (Bardovi-Harlig, 1987; Di, 2006; Razai, 2006; Sadighi, Parhizgar & Saadat, 2004) indicated that the respondents used preposition stranding more readily than pied piping due to salience of preposition stranding in English. Other studies revealed that the respondents utilized more instances of pied piping than preposition stranding (Carranza, 2009; Mazurkewich, 1985; Van Buren & Sharwood Smith, 1985). Some more studies revealed that the respondents produced nearly equal rates of preposition stranding and pied piping (Makvandi & Gorjian, 2014; Salehi, 2009). The results of research question four
are consistent with the findings of the studies implemented by (Makvandi & Gorjian, 2014; Salehi, 2009) where EFL learners produced approximate instances of preposition stranding and pied piping. Besides, the results of research question four lent support to multi-factor phenomenon. The underlying assumption of this phenomenon is that, two or more language factors work in close association in shaping the acquisition of target language structures. This agrees with the results of a study undertaken by Hatch (1983a) who examined the role of salience factor and transfer from native language in the acquisition of L2. The researcher came to the conclusion that, both language transfer and salience factor interact in the production of some phonological and morphological structures. Furthermore, the results of this question ran against the results of the studies carried out by (Bardovi-Harlig, 1987; Di, 2006; Razai, 2006; Sadighi, Parhizgar and Saadat, 2004). These studies concluded that preposition stranding was the preferable option by the respondents over pied piping. Also the findings of question four opposed the results of studies stated that pied piping was produced by the respondents more than preposition stranding (Carranza, 2009; Mazurkewich, 1985; Van Buren & Sharwood Smith, 1985).

5.1.5 English proficiency levels and negative Arabic transfer

Question 5 Are there any significant differences among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions?

For the purpose of answering question five, a cloze test and fill-in-the-blank test were utilized. The cloze test was employed to classify the respondents into three proficiency levels, e.g. advanced level, intermediate level and low level. Moreover, fill-in-the-blank test aimed at
investigating whether language transfer differs across the three levels of proficiency. The results related to research question five revealed that there is no statistical significant difference among the low, intermediate and advanced Jordanian EFL learners in terms of negative Arabic transfer when acquiring English prepositions. This implies that the respondents from the three proficiency levels resorted equally to their native language (Arabic) when using English prepositions.

Adoption of transfer strategy by the three levels of respondents on an equal footing can be justified by the fact that the respondents in the present study were not disparate to a large extent with respect to their cultural and educational backgrounds and have not practiced English sufficiently as a medium of communication in Jordan. More precisely, all the respondents regardless of their proficiency level have a little exposure to English and their experience with the language is restricted to English classes (Salameh, 2012). The dominant language outside classes is always Arabic, their native language. Therefore, the difference between the three proficiency levels regarding reliance on native language when using English prepositions is statistically insignificant.

The results of research question five are in agreement with the results of some previous studies (Bhardwaj 1986; Hadadi, Goodarz, & Abbasi, 2014; Hussein & Mohammad, 2011; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). These research revealed that language transfer either becomes more apparent at advanced level or remains stable at all L2 proficiency levels. According to Hiki (1995) language transfer is not necessarily associated with L2 proficiency level. Hadadi, Goodarz and Abbasi, (2014) examined the relationship between L1
transfer and L2 proficiency level. The researchers concluded that, the influence of L1 was the same for the three proficiency levels. This implies, there were no differences between low, intermediate and advanced EFL learners with respect to reliance on L1.

However, the results of this research question ran counter to the findings of some previous studies (Bu, 2012; Chen, 2007; Erarslan & Hol, 2014; Liao, 2010; Phoocharoensil, 2013). These studies asserted that EFL learners at advanced level made significantly less transfer errors than learners at low level. Thus, language transfer is mitigated with the increase in L2 proficiency. The conflicting findings among studies revealed that language transfer is present in the language of EFL learners regardless of their proficiency level and the studies showed that, L1 transfer decrease with increase in L2 proficiency level could be attributed to two main reasons. 1- These studies have not examined the same L2 structures and have not been implemented on EFL learners from the same L1 background. These studies examined the acquisition of different L2 structures among EFL learners from variety of L1 backgrounds. Therefore, no general consensus has been reached regarding the relationship between language transfer and L2 proficiency level. 2- The aforesaid studies employed disparate measurement instruments to examine the correlation between L2 proficiency level and language transfer. Studies that used composition test or translation test are not expected to reveal the same results of studies that used fill-in-the-blank or multiple choice tests because the nature of instruments is different. According to Lococo (1976 cited in Wiertelak & Pawlak, 2012, p.12) the proportion of transfer errors depends on the instrument used by the researcher. For instance, translation tests motivate the respondents to produce L1-based errors more than any other task.
5.1.6 Gender and negative Arabic transfer

Question 6- Are there any significant differences between genders in terms of negative Arabic transfer when acquiring English prepositions?

The data obtained from fill-in-the-blank test were used to answer this question. The results of this question displayed that there is no a significant difference between males and females in terms of negative Arabic transfer when acquiring English prepositions. This is because p value is greater than 0.05 (p=.127 >0.05). These results can be interpreted by saying that both Jordanian males and females are not significantly disparate with respect to their educational backgrounds. The two groups have studied English as L2 for twelve years before joining the university and had a similar exposure to the language. Therefore, both males and females exhibited similar rates of transfer errors.

The findings of research question six are in line with the results of some studies by (Abusaeedi, Asghar & Faezeh, 2015; Llach, 2009; Cheng 2001). These studies concluded that no gender differences were found with regard to language transfer errors. The results of question six ran counter to some studies undertaken by (Al Yaari & Almaflehi, 2013; Burstall, 1975; Catalán & Alba, 2008; Li, 2004; Stapa & Irtaimeh 2012). These studies concluded that there are gender differences with respect to reliance on native language when acquiring the target language.

5.2 Contributions of the present study to the field of second language acquisition

This section reports the contributions of the current study to the growing body of second language acquisition on the basis of the findings obtained from the instruments administered to the respondents.
The results of the present study lent strong support to the moderate position. As indicated earlier, the moderate position is a meeting point between the advocates of language transfer and the supporters of intralingual transfer. This position holds that language patterns produced by EFL learners are influenced by both transfer from native language and intralingual interference. More precisely, both factors contribute actively to shaping the structures of the target language.

Previous studies that were implemented within the scope of L2 acquisition have reported contradicting findings with regard to sources of errors. Some researchers claimed a minimal role for language transfer in favour of intralingual interference (Ahmadvand, 2008; Bailey, Madden & Krashen 1974; Bataineh, 2005; Castro, 2013; Dulay & Burt, 1973, 1974, 1975). Other researchers exaggerated the influence of language transfer and discounted intralingual interference (Abu Naba’h, 2011; Fries, 1957; Gass & Silenker, 1992; Khodabandeh, 2007; Phoocharoensil, 2013; Simic, 2010, Tahaineh, 2010). However, the results of this study supported the moderate position. It was found that both language transfer and intralingual interference play an important role in the acquisition of English prepositions by Jordanian EFL learners.

Previous studies conducted on the acquisition of English prepositions by Arab EFL learners have limited the investigation to one or two usages of prepositions. For instance Al-Qudah, (2013), Asma (2010) and Habash (1982) focused primarily on the temporal and spatial relationships and neglected the other usages of prepositions. The present study contributed to the body of literature by studying six different usages of English prepositions, that is, temporal usage, spatial usage, preposition combinations, prepositions of support and opposition, prepositions of instruments and manner and prepositions of cause and purpose. The inclusion of
such big number of usages is an effort to get a more comprehensive understanding concerning the problems that Jordanian learners of English encounter in their use of prepositions. This in turn would help English language teachers and grammar books’ authors identify the areas of difficulties and develop effective methods for teaching prepositions (for Arabs and, in specific, Jordanian Arabs).

The present study investigated the syntactic aspect of English prepositions together with the semantic aspect. The syntactic aspect is represented by the two constructions, namely preposition stranding and pied piping. Previous studies implemented on the acquisition of English prepositions focused on one of the two aspects independently of another. However, the present study added to the previous literature by investigating the two aspects together. The present study examined the aforesaid six usages of prepositions alongside preposition stranding and pied piping. Studying the two aspects of prepositions would help in reaching a deeper comprehension of the acquisition of English prepositional system. Besides, previous studies implemented on the acquisition of English prepositions by Jordanian EFL learners have restricted the investigation to one academic institution (Al-Qudah, 2013; Tahaineh, 2010). However, the present study selected respondents from ten universities in Jordan in order to ensure maximum representativeness of the sample to the whole population of the study.

The relationship between language transfer and the external factors interacting with it is still a controversial issue in L2 research. Thus, the results of this study pertinent to English proficiency level and gender would contribute to gaining additional knowledge on the role of the external factors accompanying language transfer in the acquisition of L2. The results indicated
that language transfer is not always conditioned by L2 proficiency level and language transfer cannot be differentiated by gender.

5.3 Implications of the study

According to Rutherford (1982) the chief purpose of second language research is to reach a deeper comprehension of a specific linguistic phenomenon and suggesting some implications to the field of L2 teaching. This section reviews the theoretical as well as the practical implications of the study. The review will start with the theoretical implications, followed by the practical implications based on the results of the study. Practical implications are divided into two sub-parts. The first part includes implications to textbooks’ authors concerning English prepositions, whereas the second part comprises pedagogical implications for teaching English prepositions.

5.3.1 Theoretical implications of the study

The proponents of the developmental position (Bailey, Madden & Krashen, 1974; Dulay and Burt 1973, 1974, 1975; Fathman, 1975) have viewed language transfer as insignificant factor in the acquisition of L2, claiming that the developmental factor or intralingual interference is the most influential factor when acquiring L2. This claim was rejected completely by the advocates of Contrastive Analysis approach on the ground that language transfer is the only factor at work. The results of this study have lent support to the two aforesaid views (supporting views of language transfer and intralingual interference). The results displayed that both language transfer and intralingual interference work in a close
connection in forming the acquisition of English prepositions. The results elevated the status of both language transfer and intralingual interference as the primary sources of learners’ errors.

Many theoretical views have attempted to elucidate the process of acquiring preposition stranding and pied piping. One of those views is Markedness Theory. This theory holds that L2 learners are expected to acquire pied piping, the presumably unmarked form, earlier than preposition stranding the marked form. The assumptions of Markedness Theory run totally counter to Salience position. This position is based on the claim that L2 learners are exposed to preposition stranding more than pied piping due to the common use of preposition stranding in English. Therefore, L2 learners are expected to acquire preposition stranding earlier than pied piping. Another theoretical view explains the acquisition of preposition stranding and pied piping is that of language transfer. The view of language transfer argues that the preference of preposition stranding over pied piping or vice versa is constrained by the presence of these two constructions or one of them in the first language. To be more specific, the construction that exists in the first language will be acquired earlier by L2 learners or it will be the preferred option. The results of this study clearly supported the positions of Salience factor and language transfer. This is because the respondents in this study have shown a high use of preposition stranding, the supposedly salient construction in English. Furthermore, the respondents have shown a frequent use of pied piping, the existing construction in Arabic.

Three main theoretical views attempted to explain the relationship between language transfer and L2 proficiency level. The first view asserts that less language transfer errors are expected to take place as learners make progress in the acquisition of L2 (Bu, 2012; Chen,
The second view contends that language transfer errors occur among advanced L2 learners more than less advanced learners (Bhardwaj 1986; Klien, 1986; Klein & Perdue, 1993; Salehi, 2009). The third view states that language transfer errors remain stable across different proficiency levels (Hadadi, Goodarz & Abbasi, 2014; Mohammad 2011). The results of this study lent support to the third view, where respondents’ errors remained the same across the three proficiency levels; advanced, intermediate and low.

5.3. 2 Practical implications of the study

This section is grouped into two parts. The first part reviews implications directed to textbook authors. The second part presents implications for teaching English prepositions.

5.3. 2.1 Implications to textbooks’ authors

First, based on the researcher’s experience during the period of studying English as a target language, it was noted that some English grammar books give a marginal importance to English prepositions. These books focus primarily on structures such as tenses, modals, and passive voice, whereas prepositions are either discussed quickly in the concluding chapter or neglected totally. Young and Reigeluth (1988) argued that, textbooks shape 75% to 90% of students’ knowledge about particular subject. This statement is in line with Wang (2006) who stated that textbooks exert immense influence on the acquisition of L2 if EFL learners depend on textbooks as the only source of exposure to the target language. The lack of focus on teaching English prepositions is best represented by the high proportion of errors in some usages of prepositions investigated in this study such as spatial preposition, prepositions
combinations, prepositions of instruments and prepositions of purpose and cause. Therefore, in order to help Jordanian EFL learners acquire prepositions more effectively, textbooks’ authors in Jordan, in particular, and the world, in general, should place more emphasis on these language structures. Prepositions should be regarded as a significant language item that contributes substantially to shaping the language of Jordanian EFL learners. In addition, prepositions should be explained extensively in grammar books with plenty of examples and drills because their usages cannot be easily acquired as indicated by the results of this study.

Second, textbooks’ authors are recommended to include all usages of English prepositions and not limiting the discussion about prepositions to a restricted number of usages. Discussing many usages of prepositions in the textbook would expand the knowledge of EFL students concerning the use of these language structures. Textbooks’ authors should not concentrate heavily on the frequently used English prepositions and at the same time placing less emphasis on the other usages. Fair number of pages should be allocated for each usage of prepositions. For instance, the spatial and the temporal usages of prepositions are the most common in English language whereas prepositions of purpose and cause are less used in language, therefore all usages of prepositions should be explained in depth in these books irrespective of their frequency in language. The present study investigated six usages of prepositions, textbook authors can benefit from the results related to each usage in order to understand the difficulties that EFL learners encounter when acquiring the different usages of prepositions.

Third, textbooks’ authors can conduct detailed and comprehensive comparisons between prepositions in the native and target languages. For instance, if the textbook is directed to
students whose mother language is Arabic, the comparison should be between English and Arabic prepositional systems. Implementing such cross-linguistic comparisons is so beneficial to EFL students. These comparisons can supply students with extensive knowledge on the similarities and differences between prepositions in the two languages. Furthermore, comparisons between prepositions in two given languages can be helpful in predicting the areas where EFL learners could commit L1 transfer errors. This is consistent with Odlin (1989, p.2) who stated that “such cross-linguistic comparisons constitute an indispensable basis for the study of transfer”. This particular study implemented a cross-linguistic comparison between English and Arabic prepositions. Language teachers and EFL learners can make use of this comparison in order to gain more insight into the differences and similarities between English and Arabic prepositions.

5.3.2.2 Implications for teaching English prepositions

First, English language teachers are advised to teach prepositions according to the usages in which they occur. The present study investigated six usages of English prepositions but not prepositions independently of their usages as manifested in the results pertinent to research question three. Thus, if English language teachers teach prepositions based on their usages, L2 students will acquire them much more easily than teaching each preposition individually. For instance, teachers can explain to their students all prepositions that express spatial relationship with some illustrative examples. This process can be followed in teaching all usages of English prepositions. However, if teachers teach their students each preposition independently (not together with its usages) students will most likely get confused and lost because English
prepositions are much in number and their meanings are interrelated. For instance, in teaching spatial prepositions, teachers can tell their students that the following prepositions are used to express the notion of place i.e. *Above, across, after, against, along, among, around, at, below, behind, beside, between, beneath, in, on, to, from* and *under*. After that, teachers are recommended to put each preposition in a sentence in order to show the students how those prepositions are used when indicating spatial meaning. Finally, teachers can ask their students to give an example on each of the aforementioned spatial prepositions in order to secure that the students well grasped this particular usage. The present study came up with this method of teaching English prepositions based on investigating six usages of prepositions but not individual prepositions as revealed in the results of research question three.

Second, the results of the present study showed that preposition combinations are the most difficult usage to acquire by Jordanian EFL learners. Therefore, English language teachers, particularly in Jordan need to study this specific usage thoroughly in order to understand the challenges encountered by their students and to develop some drills and methods on teaching preposition combinations with the aim of helping students to use this usage correctly. For instance, teachers can explain to their students that some verbs, nouns and adjectives in English collocate only with one preposition. Teachers can inform their students that one of the methods to acquire this usage is through memorizing these prepositions as an essential unit of the verbs, nouns and adjectives they accompany. This is in agreement with Grubic, (2004) who pointed out that mastering preposition combinations can be attained via acquiring those prepositions as part of the verbs, nouns and adjectives they combine with.
Third, it is recommended that, Jordanian teachers direct the attention of L2 students to the areas of similarities and differences between English and Arabic prepositions. It is argued that the linguistic differences between two prepositional systems are the leading factor for committing errors by EFL learners, while similarities play a helpful role in acquiring L2 through what is termed positive transfer (Lindstromberg, 2010). For instance, it was noted during the course of collecting the data for the present study that some respondents added the preposition on after the adjective accustomed. This error stems mainly from the differences between English and Arabic. This is because in Arabic the preposition on is used after accustomed, not the preposition to. In other cases, the respondents correctly added the preposition by before the noun train. Such correct usage can be attributed to the similarities between English and Arabic when using prepositions of means of transportation. Thus, if teachers help actively in raising students’ awareness concerning the differences and similarities between English and Arabic prepositions, the rate of errors in the use of English prepositions could decline dramatically. Raising the awareness of students can be obtained through exposing the students to plenty of examples and sentences where English and Arabic prepositions are used both differently and similarly. After that, the students can be instructed to compose more sentences containing prepositions so as to ensure they gained some insight into the differences and similarities between the two prepositional systems of English and Arabic. This particular study conducted a comparison between preposition in English and Arabic with the aim of pinpointing similarities and differences between the two prepositional systems.

Fourth, based on the findings of the present study, which show that transfer from Arabic is an influential factor in acquiring English prepositions, Jordanian EFL teachers are advised to be
aware of the instances where negative transfer from native language may take place. Perhaps teachers could show their students some examples from previous studies that exhibit the occurrence of language transfer. Raising Jordanian EFL learners’ awareness of the negative role of L1 would help those learners in minimizing or at least avoiding such type of errors.

Fifth, based on the results of the study which show that the respondents over-generalized the use of one preposition to another, teachers could explain to L2 students that the meaning of many English prepositions is interrelated. More specifically, two prepositions can be used with slight difference in meaning such as the prepositions *in* and *at* when expressing the notion of space and the prepositions *to* and *for* when describing the notion of purpose. Thus, teachers can explain to the L2 students the differences between these pairs of prepositions with sufficient illustrative examples to enhance the understanding of Jordanian EFL learners.

Sixth, Jordanian EFL learners should rely on many language materials and resources when gaining knowledge on English prepositions such as grammar books, dictionaries, research papers about prepositions, newspapers, TV shows and audio tapes. Jordanian EFL learners can refer to all these resources in order to understand how to use English prepositions correctly. They can extract some parts from these resources that are related to the use of prepositions and develop drills and exercises with the aid of their teachers so as to enhance their comprehension about the proper usage of preposition.
5.4 Limitations of the current study and suggestions for future research

The present study was limited to Jordanian EFL learners. Future research are recommended to expand the scope of this study to EFL learners from different L1 backgrounds in order to examine whether language transfer varies across different languages or not. It is believed that, inclusion of EFL learners from various L1s will contribute significantly to the field of second language acquisition. Moreover, the present study can be extended to include EFL learners from other Arab countries in order to investigate if language transfer differs across various Arabic language dialects.

The present study was restricted to English majors at different universities in Jordan. Further research can be conducted on both English and non-English majors in order to compare and contrast the performance of the two groups of participants. This comparison will provide linguists and researchers with additional knowledge about the correlation between language transfer and quantity of exposure to the target language. This study can be replicated on both undergraduate Jordanian EFL learners and school students. To the best of researcher’s knowledge such comparison is rarely conducted in Jordan. Therefore, there is an urgent need to implement comparative studies of this type because they are seldom conducted.

This particular study employed fill-in-the-blank test to examine the role of language transfer in the acquisition of English prepositions. Other studies (Habash, 1982; Tahaineh, 2010) used composition test and multiple choice test. Future research are recommended to combine two or more measurement instruments to examine the role that test type plays in the
production of language transfer errors when acquiring English prepositions. Lococo (1976, cited in Wiertelak & Pawlak, 2012, p. 12) argued that test type has a major influence on the production of errors by testees. This is consistent with Liao (2010) who investigated the role of language transfer in the acquisition of English phraseology. Liao reached the conclusion that test type had an effect on the performance of the respondents. To be more specific, the respondents achieved better accuracy on the multiple choice test than grammaticality judgment test.

The present study investigated six different usages of English prepositions namely; the temporal usage, the spatial usage, prepositions combination, prepositions of support and opposition, prepositions of instrument and manner and prepositions of cause and purpose. Future studies could expand the scope of this study by including more usages of English prepositions. Examining more usages would help in arriving at a deeper understanding of the difficulties that Jordanian EFL learners encounter when acquiring English prepositions. Furthermore, this particular study investigated the acquisition of preposition stranding and pied piping in interrogatives. The present study can be replicated by examining the acquisition of preposition stranding and pied piping in both interrogatives and relative clauses. The findings of such studies would be beneficial to Jordanian EFL learners and other Arab EFL learners because very few studies have been conducted in the Arab world on preposition stranding and piping in interrogatives and relative clauses.
5.5 Summary

The present study investigated native language transfer in the acquisition of English prepositions by Jordanian EFL learners. Previous studies have indicated that language transfer is a significant factor influencing the acquisition of English structures in general and prepositions in particular (Asma, 2010; Blom, 2006; El-nabih, 2010; Khodabandeh 2007; Phoocharoensil, 2013; Simic, 2010; Tahaineh, 2010). The results of this study revealed that language transfer affects the acquisition of English prepositions. In addition to language transfer, the findings displayed that intralingual interference is the major factor responsible for errors occurring in the acquisition of English prepositions. It could be said that the results of this study supported the moderate position. Language transfer is neither the only factor affecting the acquisition of English prepositions nor the primary one. Language transfer interplays with intralingual interference in forming the acquisition of English prepositions.

The findings also revealed that preposition combinations is the most difficult usage of prepositions for Jordanian EFL learners. Errors in the use of preposition combinations could be due to both language transfer and intralingual interference. Furthermore, the current study examined the acquisition of preposition stranding and pied piping in interrogatives. The results showed that Jordanian EFL learners used approximate rates of preposition stranding and pied piping. This study also examined two external factors interacting with transfer from native language namely; English proficiency level and gender. It was found that Jordanian EFL learners relied equally on their native language irrespective of their L2 proficiency level. In other words, there is no statistical significant difference among the low, intermediate and advanced Jordanian EFL learners with regard to transfer errors when using prepositions in English. The results of this
study additionally showed that there is no significant difference between Jordanian males and females concerning language transfer errors.

In light of the findings of this study, contributions of the present study to the field of L2 acquisition were reported earlier in this chapter. The study also provided some theoretical and practical implications. Practical implications section was divided into two sub-sections. Sub-section A- was directed to textbooks writers, while sub-section B- presented some implications for teaching English prepositions. In addition, some suggestions for future research were presented based on the limitations of this particular study.
BIBLIOGRAPHY


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APPENDICES

APPENDIX I

THE THREE INSTRUMENTS

A- FILL-IN- THE-BLANK TEST

Instructions

Read the sentences below carefully, then fill in the blanks with the appropriate prepositions. You may use the same preposition more than once. In case no preposition is required, please mark ‘Ø’ in the blank.

(In, to, for, at, of, with, about, on, by, from, since, Into, Onto, Out of.)

1- Some trees usually lose their leaves ______ autumn.
2- The prime minister will go to California ______ the seventh of his month.
3- We came to England ______ 1974 and have lived there since then.
4- He loves watching James Bond films ______ Christmas Day.
5 - My favorite TV program starts ______ 6:00 o’clock.
6- England has not won the World Cup in football ______ 1966.
7- There is nothing more we can do here. Let us go______ home.
8- There is a big olive tree ______ the middle of the garden.
9- We have reached_____ California after driving for two days.
10- There were some beautiful pictures ______ the walls of the sitting room.
11- We did not arrive ______ the airport until the early morning.
12 – He almost died when he fell______ the river last night.
13- She looks stupid with this haircut. Everybody will laugh ______her.
14- We have certainly benefited_______ the changes in the law.
15- I am very angry ______ my friends for letting me down at the last moment.
16- There has been a rise ______ the number of people out of work.
17- The minister’s participation ______ the summit is seen important to its success.
18- He had become accustomed________ living without electricity.

19- Are you _______ or against the plan?

20- It is wise to go_______, rather than against public opinion.

21- Everyone in the class has voted ______Mary to be the class monitor.

22 - Are you _______ or against opening shops on Saturdays.

23- Remember that every one of us is ______ you.

24 – The minister is ________ everyone who wants to help the homeless.

25- The baby eats his soup ______ a spoon.

26- We were received ______ utmost respect and dignity.

27- The employees usually go to work ______ train.

28- I cried ______ pain because I hurt my knee by accident yesterday.

29-The thieves broke the window of the school ______ a hammer.

30 -The girl shouted _______ despair when she heard the bad news.

31- Nowadays, many people will do anything ______ the money.

32- The hunter aimed his gun carefully _______ the gazelle.

33- The survivors were weak ______ lack of food and tiredness.

34- The man worked very hard ______ the good of his family.

35 - Edward is going into the shop ______ some cigarettes.

36 -The man died ______ an overdose of drugs three weeks ago.
B- GRAMMATICALITY JUDGMENT AND CORRECTION TASK

Instructions

All the participants in the study are required to perform the following two steps.

1- Read each of the following sentences. If you think the sentence is correct, put a tick (√) in the correct box. If you think the sentence is wrong, put a cross (x) in the incorrect box. If you are not sure put (√) the not sure box.

2- Correct the sentences you judged as incorrect in the space provided below each sentence.

Example

Correct    incorrect    not sure

1- Which library do you usually study?

Correction: At which library do you usually study?

Or

Which library do you usually study at?
<table>
<thead>
<tr>
<th>Correct</th>
<th>Incorrect</th>
<th>Not sure</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>1- Which table did you put the book?</td>
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<tr>
<td>2- Who did Fred give the marble?</td>
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<tr>
<td>3- Which dog did Tom play?</td>
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<tr>
<td>4- Which picture did her friends look?</td>
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<tr>
<td>5- The boy can sing that song very well.</td>
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<td>6- Which country do you prefer to live?</td>
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<td>7- The girl donated her savings to the town hospital</td>
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<td>8- Which park did you find the rabbit?</td>
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<td>9- Who did she reveal her secret?</td>
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<tr>
<td>10- We are going to the movie later this evening.</td>
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<tr>
<td>11- Which place do you come?</td>
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<tr>
<td>12- It is a nice day for a walk along the beach.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13- Which tree did the naughty boy sit?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
14- What are the students complaining? 

15- Which subject did you read a book? 

16- John wrote the letter to his friend after the party. 

17- Which war did John lose his hand? 

18- Which room did you write a letter? 

19- If it rains tomorrow, I will take my umbrella. 

20- Who did they vote? 

21- Who did you buy these flowers?
C- THE CLOZE TEST

Please read the passage carefully, then fill in the blanks with the suitable words from the list of words provided below. Each blank stands only for one word.

How to be a successful businessman

(Restaurant, and, was, the, days, I, please, in, he, dishes, was, borrowed, pilot, get, money, a, all, plane, their, a, did not, were, and, too, restaurant, working, manager, worked, later, front).

Have you ever wondered why some people are successful in business and others are not? Here is a story about one successful businessman. He started out washing ______ and today he owns 168 restaurants.

Zubair Kazi was born in Bhatkal, ______ small town in southwest India. His dream was to be an airplane ______, and when he was 16 years old, he learned to fly small ______. At the age of 23 and with a little amount of money ______ his pocket, Mr. Kazi moved to the United States. He hoped to ______ a job in the airplane industry in California. Instead, he ended up ______ for a company that rented cars.

While Mr. Kazi was working at ______ car rental company, he frequently ate at nearby restaurant. To save ______ on food he decided to get a job there. For two months, ______ worked a cook assistant. His job was to clean the kitchen ______ help the cook. "I did not like it," Mr. Kazi says, "but ______ always did the best I could." One day, Mr. Kazi's two co-workers ______ come to work. That day, Mr. Kazi did the work of ______ three people in the kitchen. This really impressed the owners of ______.
A few months later, the owners needed a manager for a new ______. They gave the job to Mr. Kazi. He worked hard as the ______ and soon the restaurant was making lots of profit.

A few years_______, Mr. Kazi heard about a restaurant that was losing money. The restaurant ______ dirty inside and the food was terrible: greasy and undercooked. Mr. Kazi ______ money and bought the restaurant. For the first six months, Mr. Kazi ______ in the new restaurant from 8 a.m. to 10 p.m., for seven ______ a week. He and his wife cleaned up the restaurant, remodeled the _____ of the building, and improved the cooking. They also tried hard to ______ the customers. If anyone had to wait more than ten minutes for ______ food, Mrs. Kazi gave them a free soda. Before long, the restaurant ______ making a profit. A year later, Mr. Kazi sold his restaurant for ______ profit. With the money he has earned, he bought three more restaurants that ______ losing money. Once again, Mr. Kazi cleaned the new restaurants up, improved the food, ______ re-trained the employees. Before long, these restaurants were making a profit, ______.
## APPENDIX II

### NAMES OF TESTS’ EVALUATORS

<table>
<thead>
<tr>
<th>Name</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Mahmoud Kanakri</td>
<td>Yarmouk University</td>
</tr>
<tr>
<td>Dr. Issa Al-khotabeh</td>
<td>Muta’h University</td>
</tr>
</tbody>
</table>
APPENDIX III

THE CONSENT LETTERS

Date: 10-3-2014

To whom it may concern.

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled “An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers” at The World Islamic Sciences and Education University. The university has granted him the permission to conduct fill-in blank test, cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Head of Department of English language

Name: Dr. Naela Mughni El-Omari

The World Islamic Sciences and Education University address: Tareq-Amman-Jordan

Phone No: +962-6-5080450 ext. 4410
Date: 21-4-2014

To Whom It May Concern:

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major Languages Studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled "An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers" at Al-Hussein Bin Talal University of Jordan. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Name: Naseeb Almahamed
Signature

Al-Hussein Bin Talal University address: Ma'an - Jordan
Date: 9-4-2014

To whom it may concern,

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in the English Study program from the Faculty of Major Languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled “An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers” at Al-Albayt University of Jordan. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Head of Department of English Language
Name: A. Kh. I. Shaif
Al-Albayt University address: Mafraq - Jordan
Phone No: +962 02 629 700
Date: 5-6-2014

To whom it may concern.

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled “An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers” at Zarqa Private University. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Head of Department of English language
Name: [Signature] 5/6/2014
Zarqa Private University address: Zarqa - Jordan
Phone No: +962 (3) 3821100
Date: 20-5-2014

To whom it may concern,

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major language studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled “An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers” at Isra University. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Head of Department of English language

Name: Muhannad Al-Khaleel, A.F. Awad
Associate Prof. & Head, Dept. of Translation

Isra University address: Airport highway- Amman- Jordan
Phone No: 962 064711830
Date: 25-2-2014

To whom it may concern,

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled "An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers" at Al-Balqa' Applied University. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

Head of Department of English language
Name: [Signature] Sura H. Khrais
Al-Balqa' Applied University address: Hay Al-Meyadin- Salt (main campus)- Jordan
Phone No: 962 5 349 1111
Date: 15- 4- 2014

To whom it may concern.

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled ‘An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers’ at the University of Jordan. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

[Signature]

Head of Department of Linguistics

Name: [Name]

University address: Amman, Jordan

Phone No: +962 6 5355 572

Department of Linguistics
To whom it may concern

This is to certify that Mr. Yuzun Shaker Al-Mahamed who is currently pursuing his postgraduate studies as a doctoral student at the Faculty of Major Language Studies, Universiti Sains Islam Malaysia (USIM), was granted permission by Al-Ahliyya Amman University to collect data in the form of a questionnaire in support of his study entitled "An Analysis of the Role of Language Transfer in the Acquisition of English Prepositions by Jordanian EFL Speakers." The questionnaire consisted of fill-in-the-blank, cloze, and error correction questions. Mr. Al-Mahamed's sample included students from all levels of study.

This certificate was issued upon his request.

Yours sincerely,

Dr. Salam Al-Mahadin
Department of English Language and Literature
Faculty of Arts.
To whom it may concern.

This letter is to confirm that Mr. Yazan Shaker Almahamed, a PhD student in English Study program from the Faculty of Major languages studies, Universiti Sains Islam Malaysia (USIM), was given the consent to collect the data for the purpose of his study entitled “An analysis of the role of language transfer in the acquisition of English prepositions by Jordanian EFL speakers” at Yarmouk University. The university has granted him the permission to conduct fill-in blank test, a cloze test and grammaticality judgment and correction task on our first, second, third and fourth year students of the English Language program.

Sincerely,

[Signature]
Head of Department of English language

Name: Dr. Lutfi Abulhaja
Yarmouk University address: Shafiq Irshidat st, 21163- Irbid- Jordan
Phone No: +962 2 721 111
Date: 6-5-2014

Mutah University

To whom it may concern

This is to certify that Mr. Yazen Shaker Al-Mahamed who is currently pursuing his graduate studies as a doctoral student at the Faculty of Major Languages Studies, University Science Islam Malaysia, (USIM), was granted a permission by Mutah University to collect the data in the form of questionnaire in support of hi study entitled “An Analysis of the Role of Language Transfer in the Acquisition of English Prepositions by Jordanian EFL Speakers”. The questionnaire consisted of Fill-blank test, Cloze test and Grammaticality judgment and correction task. Mr. Al-Mahamed’s sample included students from all levels of study.

This certificate was issued upon his request.

Yours sincerely

Head of department of English language and literature

Dr. Ali Awamleh
Faculty of Arts
Mutah University Address: Karak – Mutah, Jordan
Phone number: +962 (3) 2392380