Frequent Arabic Grammatical Errors Among Undergraduate Students

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Abstract

This study investigated types and frequencies of grammatical errors and strategies used to minimize them among 81 second- and third-year undergraduate students studying Modern Standard Arabic (MSA) as a foreign language. I collected data by completing a writing task consisting of four prompts and one written sample selected from each participant's final exam. Additionally, participants addressed the strategies they used to minimize grammatical errors in their MSA writing. Lastly, I conducted semi-structured interviews with 18 participants. The results identified, analyzed, and classified 646 grammatical errors to reveal cases, types, and frequencies. The three most frequent errors concerned *prepositions* (23.5%), *the definite article* (18.5%), and *gender agreement* (17%). Most errors (58%) were attributed to intralingual transfer and the rest (42%) to interlingual transfer. Respondents used a variety of strategies to minimize such errors: *reading out loud, proofreading by another person, memorizing grammatical patterns and rules, and memorizing example phrases and sentences.* The results indicated potential implications that current and future Arabic instructors can use to help learners develop their grammatical competence across all communication modes.

Keywords: Arabic grammatical errors; Error analysis; Interlingual and intralingual transfer; Undergraduate students

Introduction

Developing proficiency in a second language or a foreign language (L2) is a lifelong process, and a learner is likely to make errors in all aspects of the language (Dörnyei, 2001). One of the key components of learning a new language is grammar, as it facilitates the order of words and phrases in a sentence to effectively convey thoughts and intents, and to clarify the meanings of messages (Ellis, 2006, 2016; Oxford, 2017; Richards & Reppen, 2016; Spada & Tomita, 2010). Grammar instruction differs in its significance in a second-language learning setting compared with a foreign-language learning one. In second-language learning, grammar generalizations can result from the considerable amount of comprehensible input and opportunities that a learner has to use the language across real-life communicative contexts outside the classroom. Conversely, in a foreign-language learning context, exposure to the language and opportunities to use it in genuine communication outside the classroom are very limited. Consequently, a learner must learn grammar in the classroom and faces challenges in making grammar generalizations.

Given the importance of grammar in developing language proficiency, I assert that examining, identifying, and understanding a learner's grammatical errors, their nature, sources, and linguistic consequences are critical to the

teaching/learning process. Besides advancing the knowledge base of the discipline, a focus on grammatical errors provides an instructor with feedback on a variety of levels: First, it helps diagnose the challenges that a learner faces in different stages of learning grammar (see Brosh, 2017; Cook & Suter, 1980), and how error patterns change over time. Second, it helps the instructor design and develop customized and effective remedial interventions for learners. Third, it raises an instructor's awareness of how effective his or her teaching strategies are and what changes to make in order to cater to the needs of the learners. Fourth, an instructor can effectively guide learners on a path to correct their errors, uproot their wrong linguistic behavior, and achieve the learning goals (see also Corder, 1981). Additionally, the classification of grammatical errors can shed light on each learner's progress and on his or her level in learning the language, as well as provide insights into the learner's engagement and how the language is learned. This, in turn, can aid textbook authors, curriculum developers, and test designers concerning specific challenges a learner faces and the types of errors that interfere most with the learner's ability to communicate effectively. Although a substantial body of research has explored grammatical errors in different languages, little research has been conducted to understand errors done by native English speakers learning Arabic as a foreign or second language.

To that end, the purpose of this study is

1. to explore and map written types of common grammatical errors and their frequencies made by undergraduates, native English speakers who study Modern Standard Arabic (MSA);
2. to examine learners' overall improvement from the second to the third year in learning MSA as a foreign language; and
3. to identify strategies that learners employ to minimize such errors.

The underlying assumption of this study is that MSA is taught and learned as the primary version of the language in most programs of L2 Arabic at the secondary and postsecondary level (see also Ayari, 1996; Ibrahim & Aharon-Peretz, 2005).

Literature Review

The significance of learning grammar

Second Language Acquisition (SLA) literature provides diverse views regarding the significance of learning grammar. Some scholars consider grammatical knowledge to be essential for the mastery of a second or foreign language. They view grammar as substantial in the wider communicative context of learning the language, creating a coherent and cohesive discourse beyond the sentence level, and essential for a speedy learning process (Celce-Murcia, 2016; Ellis, 2006; Loewen et al., 2009; Ur, 1988; Spada & Lightbown, 2008).

Others, on the other hand, view grammar as a secondary skill, which requires limited attention in the L2 classroom (Brown, 2007; Krashen, 1999; Truscott, 1999). They argue that grammar could be postponed to later stages in learning a language because novice students will learn a good deal of grammar independently. They rely heavily on context, communicative strategies, and memorization of lexical chunks to construct sentences. Using these tools, learners can convey significant meaning despite grammatical errors (Ellis, 1984, 2006). Such an argument may be valid for learning a second language or basic communication in a foreign language, however, nuances in meaning or specific points could be miscommunicated without grammar precision (see Loewen et al., 2009). Ultimately, it is these calls for ignoring grammar that are incredibly counterproductive in a foreign-language learning setting, where the exposure to the target language is restricted to formal teaching in the classroom. In such an environment, learners do not have many opportunities to internalize grammar rules subconsciously. Thus, more emphasis on grammar and error correction in the classroom is essential (Lightbown and Spada, 2006). Finally, other voices raised the importance of systematically finding the right balance and connection between teaching language structures and communicative language activities (Lee & Valdman, 1999; VanPatten, Williams, & Rott, 2004).

SLA literature also provides theoretical and pedagogical arguments for learners to develop *explicit* and *implicit* grammar (Ellis, 2005, 2009). *Explicit grammatical knowledge* is a declarative, conscious knowledge of rules that addresses grammatically correct language. *Implicit grammatical knowledge* refers to procedural knowledge acquired subconsciously. This implicit knowledge moves beyond the accurate-or-inaccurate, dichotomous view of grammar and is employed automatically in oral and written discourses (Conrad, 2016; Ellis, 2006; Larsen-Freeman, 2003; Richards & Reppen, 2014, 2016). We can view explicit and implicit grammatical knowledge as two poles of a continuum. Different points on the continuum represent different degrees of student engagement with grammar in the language-teaching process. Choosing the level of engagement depends on a wide range of variables and conditions under which a specific mixture of form and meaning can be perceived as most appropriate. Among such variables are learners' perceptions and preferences, grammar learning experience, needs, instructional methodology, and learning strategies (Loewen et al., 2009).

Studies on grammar learning strategies (GLS) and how learners apply these strategies in oral and written communicative tasks are neglected within the broader field of language learning strategies (LLS) (Oxford, 2017; Pawlak, 2018). Oxford (2017)

defines GLS as behaviors and dynamic thoughts that a learner selects and employs consciously in specific contexts to improve the development and control of L2 grammar. This definition emphasizes that knowing the grammatical rules is essential but not sufficient. The learner needs to develop the ability to employ grammar structures accurately in real-time processing. In other words, the use of GLS can lead to the development of the learner's explicit/implicit grammatical knowledge and provide him or her with better control over grammar in a wide range of real-life communicative tasks. Pawlak (1998, 2020) classified GLS into four main groups, metacognitive, affective, social, and cognitive strategies. These strategies help enhance the learner's explicit/implicit grammar knowledge, improving his or her accuracy in controlled or spontaneous oral and written production.

Space limitations and the focus of this study on grammatical errors prevent me from further reviewing GLS. For an in-depth discussion, see Pawlak, 2018, 2020).

Grammar, an Error, and a Mistake

Before delving into the issue of grammatical errors, let us first briefly define the terms *grammar*, an *error*, and a *mistake*. The definitions presented in this section are appropriate for the framework of the present study. *Grammar* is "a description of the structure of a language and how linguistic units such as words and phrases are combined to produce meaningful [and

socially accepted] sentences in the language" (Richards, Platt, & Platt, 1992, p. 161; see also Cook & Suter, 1980). This definition highlights the significant role of grammar concerning how it may be structured in the learner's mind, influencing his or her ability to understand and use the language productively.

Linguists differentiate between an *error*, which relates to competence, and a *mistake*, which relates to performance—as well as the learner's ability to correct them. An error manifests a noticeable systematic deviation from the standard norms of the target language due to misunderstanding or ignorance of these norms. This could be caused by an incomplete knowledge of the target language model. The error is perceived as the outcome of the actual interlanguage system that the learner develops and therefore cannot identify as incorrect. Since the learner is not aware of the correct form, an error occurs continuously and cannot be self-corrected. A mistake, on the other hand, is typically random and constitutes an unintentional deviation from the norms. It can occur due to a variety of reasons, such as carelessness, memory lapse, lack of attention and concentration, or fatigue. Because the learner knows the correct form, he or she can correct the mistake when attention is called (Allwright & Bailey, 1991; Corder,

1973, 1981; Dulay, Burt & Krashen, 1982; Ellis, 2003, 2015; James, 1998, Lennon, 1991; Richards et al., 1992).

Further, parallel to the distinction between an error and a mistake, scholars distinguish the magnitude of an error—i.e., whether it is a global or a local error. A global error refers to the discourse level and could interrupt the overall structure of a sentence, thereby hindering communication, but a local error involves only a particular segment in the sentence and is less likely to interrupt communication or create processing problems (Brown, 2000; Celce-Murcia 1991; Ellis 2003, 2015; Vásquez & Alberto, 2008).

Error Sources: Cross-Linguistic Influence in Language Transfer

Familiarity with more than one language sometimes leads to deviation from the norms of either language. This deviation is known as *interference*, or *negative transfer* (Weinreich, 1967). Transfer is a psycholinguistic process whereby L2 learners activate their previous linguistic knowledge (L1) to develop and use the target language orally and in writing. Two kinds of transfer exist during language learning. The first is positive or facilitative, which refers to knowledge that advances the learner's ability to access and analyze information about the target language. This sort of knowledge often stems from similarities between the learner's L1 and his or her target

language and makes learning easier. The second kind is nonfacilitative, or intrusive, transfer, which refers either to the subconscious attempt to organize information following the principles of L1 or to the difficulty in learning new target structures as a result of L1 interference (Brown 2000; Larsen-Freeman 2000; Odlin, 1989; Richards et al., 1992). (For an overview, see Ringbom and Jarvis [2009].)

Numerous studies have investigated the effect of transfer on L2 writing. For example, Han (2004) investigated 710 Hong Kong Chinese ESL learners at different proficiency levels. The data provided evidence of syntactic transfer from Chinese to English, as the learners were inclined to think in L1 before writing in English. As a result, sentence structures of many of the participants' interlanguage strings were very similar or almost identical to sentence structures used in their native language. Scholars concluded that learners were unable to separate L1 from L2, and they used L1 as a device in learning L2. This process is unavoidable (Newmeyer, 1996; Zobl, 1980). Different approaches have been used to analyze language transfer, make predictions, and understand the sources of learners' errors, including the Contrastive Analysis Hypothesis (CA) (Fries, 1945; Lado, 1957), the Error Analysis Theory (EA) (Corder, 1967), and the Interlanguage approach (IL) (Selinker, 1972, 1992). According to the CA approach, second-language

learning is mostly determined by the transfer of structures from the learner's native language (L1) to the target language (L2). If a given structure of L2 matches the corresponding structure of L1, a positive transfer occurs, and the structure is learned with ease. Contrasting structures, on the other hand, result in negative transfer, producing errors known as *interlingual errors*. This approach assumes that the native language is the major source for the learner's errors and that the errors are attributed to formal linguistic distinctions between the two languages. Therefore, to determine areas of potential errors, a detailed and systematic comparison between L1 and L2 is required (Brown, 2000; Gass, Behney, & Plonsky, 2013). According to Odlin (1989), there is evidence of interlingual transfer in foreign-language settings where the learner's exposure to the target language is confined to the limited input provided through formal instruction and where the native language is excessively used in explaining unfamiliar lexical and grammatical items. Reliance on the interlingual transfer strategy is one way to compensate for the inadequate knowledge of the target language; therefore, many L2 errors can be predicted through the differences between L1 and L2 (Wardhaugh, 1970). Comparison alone between L1 and L2 structures without investigating how the learner deals with these structures in comprehension and production results in CA's failure to predict a significant amount of a learner's

errors. The unsatisfactory results of CA—which just views language transfer as the central process involved in learning a new language—have led to the emergence of EA and IL, which consider a learner's performance in speaking and writing.

According to the the Error Analysis Theory (EA) approach, errors not only are due to negative language transfer from L1 but also reflect universal strategies to process information. This, in turn, results in faulty inferences about the rules of the target language causing intralingual errors (Corder, 1967; Keshavarz, 2012; Schachter and Celce- Murcia, 1977). Such errors are directly connected not to the differences between L1 and L2 but rather to overgeneralization, fossilization, wrong hypotheses, incomplete application of grammatical rules, or ignorance of those rules. The contribution of EA is both theoretical and practical—i.e., to identify, describe, classify, and explain hypothesized causes of the errors and to systematically evaluate their effect on the efficiency of communication in the target language (Crystal, 2008). EA thereby enables scholars to understand the psychological and cognitive processes of second-language learning, identify the strategies a learner employs in the learning process, and uncover the nature of the relationships between the learner's knowledge and the teaching methodology (Corder, 1981; Ellis,

2015; Ellis & Barkhuizen, 2005; Gass & Selinker, 2008; Richards, 1985; Vásquez & Alberto, 2008).

According to the Interlanguage (IL) approach, the learner of a foreign language, attempting to construct the target language norms, develops his or her own self-contained independent linguistic system with its own set of rules. These rules are different from those of the mother tongue and the target language. This system is dynamic and constantly evolving (Corder, 1981; Ellis, 2015; McLaughlin, 1988; Mitchell & Myles, 2013; Selinker, 1972, 1992). According to Selinker (1972), five cognitive processes are accountable for the development of interlanguage: (a) *simplification*, a process where the learner in the early stages of L2 development employs communicative strategies to convey messages using a little of the language within a simplified system; (b) *overgeneralization*, a process where the learner extends the application of a grammatical rule of L2 beyond its accepted context by making words or structures follow a more regular pattern (see also Richards et al., 1992); (c) *restructuring*, a process where the learner uses the target language as a means to modify and rearrange existing grammar knowledge representations of his or her L1; (d) *fossilization*, a process where the learner keeps using incorrect linguistic features when using the language and does not progress further despite continuous exposure (see

also Han [2004]); and (e) *language transfer*, where interlanguage rules are sometimes impacted and shaped by language transfer from the mother tongue (see also Broselow [1984]). According to IL, the errors a learner makes during the learning process tend to reflect the influence of the mother tongue more than the target language.

Classification of Grammatical Errors

Learners' errors have been classified in different categories, such as the following (Brown, 2007; Corder, 1973, 1981; Dulay et al., 1982; Ellis, 2009, 2015; Han, 2004; Ur, 2011):

1. Omission of necessary elements (words) that should appear in a well-formed written piece of text or an oral utterance—a phrase, a clause, or a sentence
2. Addition of redundant linguistic elements
3. Wrong selection of word forms (substitution)
4. Misordering of elements

Richards (1971) investigated intralingual errors in English produced by L2 learners—speakers of Burmese, Chinese, Czech, French, Japanese, and other languages. He identified five main types of errors: (a) errors in the production of verb groups, (b) errors in the distribution of verb groups, (c) errors in the use of prepositions, (d) errors in the use of articles, and (e) errors in the use of questions. El-Farahaty (2017) investigated written grammatical errors made by 12 final-year

students of MSA. The three most common types of errors were *agreement* (37%), *wrong grammatical structure* (25%), and *prepositions* (14%). She concluded that the first two were attributed to the differences between Arabic and English, whereas preposition errors were attributed to methods of teaching prepositions.

Brosh and Lubna (2015) investigated the influence of L1, the Arabic Palestinian dialect, on writing in MSA among 30 high school native Arabic-speaking students in Israel. The findings showed a variety of errors in the morphosyntactic domain as a result of L1 interference due to the syntactic distance between MSA and the mother tongue. Such errors included violation of word order; incorrect use of verbs (singular, dual, and plural; active and passive); incorrect use of case endings; and errors in using prepositions, relative pronouns, and demonstrative determiners. Al-Yaari, Al-Hammadi, and Alyami (2013) investigated grammatical errors of 10 senior learners (all nonnative English speakers, except 1 learner, who studied Arabic as a second language in Saudi Arabia). The most common errors were in differentiating between common and proper nouns, composing verbs in the infinitive, determining the placement and gender of adjectives, and determining the time and manner of adverbs. The researchers concluded that the grammatical errors were wide-ranging and were due to a

variety of factors, including the fact that the respondents struggled to demonstrate mastery of Arabic grammar.

In sum, L2 learners apply interlingual and intralingual transfer to solve their communicative challenges and to simplify the task of learning the target language (Ringbom, 1987; Seliger, 1988). Throughout this process, learners deviate from the norms of the target language, committing errors in using nouns, adjectives, verbs, and adverbs—errors that affect word order, phrase structure, and inter-sentence cohesion within a paragraph (James, 1998; Richards, 1975, 1985).

Research Questions

The aforementioned benefits of learners' individualized strategies for more effective language learning motivated the research undertaken in this study involving Arabic learners in the American undergraduate university demographic. The study investigated the role of grammar in foreign-language learning and the significance of identifying error types, recognizing their sources, and detecting learning strategies applied by learners to prevent such errors. This descriptive inquiry-based study addressed the following research questions:

- What types of grammatical errors do second- and third-year Arabic undergraduate students make in writing?

- To what extent do grammatical errors diminish from the second year to the third year?
- What strategies do undergraduate students use to prevent grammatical errors?

Methodology

Data Collection

To investigate the research problem, I collected both quantitative and qualitative data (see Creswell, 2014), utilizing a writing task (pen and paper), a questionnaire, and follow-up in-depth semistructured interviews. Each form of data provides a distinctive type of information, which can lead to a deeper understanding of the research problem and thereby afford a more comprehensive picture. In line with the guidelines recognized by the Institutional Review Board (IRB) for ethical research, I provided participants with appropriate information on the study, including its aim, methods, and means of data storage and handling, as well as the assurance that participation was voluntary and could be withdrawn at any time. After receiving this information, each participant signed a consent form. I obtained IRB approval before beginning the study.

Participants

The participants in this study were 81 undergraduates (68% males and 32% females) between 19 and 22 who were enrolled in the second- and third-year MSA courses. The details about

participants being males and females are provided for information only without exploring the effect of gender on the production or correction of grammatical errors. Participants were L1 English speakers who had started learning Arabic as a foreign language for three hours a week at the postsecondary level in a majority-male institution. The participants did have previous exposure to the language. To clarify the comparison between second- and third-year students, I divided the participants into two groups: Group 1 (*N*=45; 30 males and 15 females), participants who had completed two years of instruction, and Group 2 (*N*=36; 25 males and 11 females), participants who had completed three years of instruction. The sample did not include heritage speakers or participants who had formally studied Arabic before their current enrollment. The participants' contact with Arabic outside the classroom (i.e., social media, consumption of movies, shows, songs) was minimal, if it occurred at all.

Writing Task

I gave participants 1 hour to complete a writing task consisting of four prompts, and I asked them to write as full a response as possible. To ensure familiarity and suitability to their language level, the prompts related to the materials in their textbooks, although participants had not previously addressed these particular topics in writing (for example, "Describe a typical day at your college" and "Write about a trip you have

taken with a friend or a family member"). I also selected one written sample from each participant's final exam (an answer to a question related to a text he or she had read). Each participant in Group 1 wrote an average of 120 words when responding to all five writing assignments in the task (a total of 5,400 words). Each participant in Group 2 wrote an average of 155 words (a total of 5,580 words). Participants reported that this time frame was sufficient and that they had revised and edited their writing tasks.

Analysis

I based the analysis of errors on Brown's (2000) model—i.e., identification, classification, description, explanation, and evaluation. Two qualified judges analyzed the grammatical errors in each participant's written responses at the word, phrase, and sentence levels. They marked as an error any violation of syntactic rules, including repeated violations. Here are some examples of errors:

- This is a (f.) professor. - < **هذا** أستاذة > should be: <هذه أستاذة >
- To the Islamic Center - < إلى **مركز** الإسلامي > should be: < إلى **الـمركز** الإسلامي >

Dina is a great student. - < دينا **ممتازة** طالبة > should be: < دينا طالبة ممتازة >

- Close to the university. - < قـريب إلى الجامعة>

  should be: < قـريب من الجامعة>

If the two judges did not agree regarding a particular error, it was removed from the sample. Errors that can be attributed to instructors who do not always respect grammatical norms of MSA were not dealt with in this study because of the difficulty to systematically evaluate them.

After identifying the errors in all of the written samples, they were classified based on their linguistic nature to reveal emerging categories and subcategories and what types of errors were more frequent than others. The next step was to determine why a particular error had been committed—i.e., identifying which of the two major types of sources: either interlingual transfer or intralingual transfer (Brown, 2007). The last step was to evaluate the effect of the different errors on the efficiency of communication, which is the ultimate goal of Arabic learning. In other words, I aimed to investigate the extent to which errors violated the overall sentence structure and thereby led to an interruption in communication.

Questionnaire

A week after collecting the written samples, I administered a survey questionnaire to participants during class time. It consisted of a single open-ended question, which aimed to collect information about the strategies that participants used to minimize grammatical errors in their MSA writing. I

categorized the responses according to the number of times the same strategies were mentioned, ranging from the most frequently mentioned to the least frequently mentioned.

Semistructured Interviews

The second phase of the study was qualitative in nature: I conducted semistructured in-depth interviews with a sample of 18 participants representing both groups (10 males and 8 females). The interviews aimed to supplement and explain the quantitative data regarding the sources of participants' grammatical errors and the strategies they used to minimize them. By interviewing participants from both groups, I could compare the sources for errors and the strategies applied to prevent them. I selected the interviewees randomly to ensure that participants with different proficiency levels will be included. I assigned participants from each group consecutive numbers from 1 to *N*, followed by the word *male* or *female*; then, I selected numbers from the two lists of participants. I prepared a predetermined set of open-ended questions to prompt discussion, enabling participants to freely express their views and ideas in their own terms and providing reliable, comparable, and qualitative data. Here are some examples:

1. Do you find yourself thinking in English when you write a text in Arabic?

2. What kind of challenges do you have when writing a text in Arabic? Can you give some examples?
3. When using grammatical structures in Arabic, do you compare them to English? If yes, can you give some examples?
4. In your opinion, does comparison between Arabic grammar and English grammar help your writing in Arabic? Can you give some examples?
5. Every language learner makes mistakes. What, in your opinion, are the main reasons for you to make mistakes in Arabic grammar?
6. Do you experience problems when learning Arabic grammar? If yes, how do you solve them?
7. What do you do to make sure you can use Arabic structures correctly in your writing?
8. In your writing, you made several errors concerning the use of prepositions. What grammar correction strategies do you use to target this kind of error?

I phrased the interview questions in a way not to affect the interviewees' responses or to lead to specific answers. The questions also enabled me to flexibly probe for details or to

discuss issues. I conducted and recorded the interviews in a quiet and relaxed atmosphere. I categorized the data into different themes that related to the research questions.

Results

The total number of grammatical errors observed was 646 (Group 1, the second-year students, was 376; Group 2, the third-year students, was 270). Most errors (58%) were attributed to intralingual transfer and developmental factors. For example, participants ignored grammatical rules, chose simple forms and structures (simplification), did not apply rules correctly, did not fully understand complex grammatical structures, extended the use of a grammatical rule beyond its accepted uses (overgeneralization), or were simply ignorant of the grammatical rules. Such errors could also result from wrong hypotheses formed by the learner, and from inadequate learning. The rest of the errors (42%) were attributed to interlingual transfer.

Types of Grammatical Errors

After I identified all the errors (in each group separately), I classified them into grammatical types. Table 1 shows the distribution of frequencies and percentages of each type of error for each group separately and for both groups combined.

Table 1. Types of Grammatical Errors Made by Second- and Third-Year Students of Arabic, and Distribution of Frequencies in Percentage

	Group 1 *N*=45	Group 2 *N*=36	Group 1 and Group 2 *N*=81
Number of errors	376	270	646
Error classification			
Prepositions	19.5%	16.0%	35.5%
The definite article	19.5%	14.5%	33.5%
Gender agreement	17.5%	14.5%	32.0%
Case ending	9.0%	11.0%	20.0%
Word order	4.5%	4.0%	8.5%
Verb transitivity	5.0%	2.5%	7.5%
Relative pronouns	2.0%	5.0%	7.0%
Nonhuman nouns	2.0%	4.5%	6.5%

The data shown in Table 1 indicate that L1 English-speaking participants who studied Arabic at the undergraduate level made a wide variety of grammatical errors. Of all these errors (646), the four most common ones concerned *prepositions* (35.5%), *the definite article* (33.5%), *gender agreement* (32.0%), and *word choice* (28.5%). Examples of errors and their sources are examined in the Discussion section.

Improvement in Grammar from Second Year to Third Year

A side-by-side comparison between second- and third-year participants (Group 1 and Group 2) reveals interesting trends concerning the number, type, and distribution of grammatical errors (see Table 1). In general, the results show that third-year participants committed fewer grammatical errors than did second-year participants. In the two most common types of errors, *prepositions* and *the definite article*, second-year participants had more errors than third-year participants. Considering *word choice*, *case ending* (using the plural and the dual), and using the *relative pronouns*, however, third-year participants had more errors than second-year participants. Considering *word order* and *gender agreement*, there was no significant distinction in the number and distribution of errors comparing both groups. It should be noted, though, that manifestation of interlingual error patterns was greater with second-year participants than with third-year participants (see Brown, 2000, 2007).

Strategies to Minimize Grammatical Errors

Table 2 addresses the types of strategies participants used to reduce errors and increase grammatical accuracy (in percentage).

Table 2. Strategies to Minimize Grammatical Errors Used by Second- and Third-Year Students of Arabic, and Distribution of Frequencies in Percentage

	Group 1 *N*=45	Group 2 *N*=36	Group 1 and Group 2 *N*=81
Number of strategies	134	84	218
Strategy used to minimize grammatical errors			
Reading out loud	30.0%	5.0%	35.0%
Proofreading by another person	14.0%	14.5%	28.5%
Memorizing grammatical patterns and rules	13.0%	14.5%	27.5%
Memorizing example phrases and sentences	12.0%	11.0%	23.0%
Using the textbook	7.5%	9.5%	17.0%
Practice writing sentences	4.5%	5.0%	9.5%
Using the internet and Google Translate	4.5%	5.0%	9.5%
Learning from error correction	4.5%	5.0%	9.5%
Simplification (avoidance)	1.5%	6.0%	7.5%
Consultation with the instructor	7.0%	----	7.0%
Comparing with English grammar	7.0%	----	7.0%
Making charts	1.5%	5.0%	6.5%
Reading for pleasure	----	5.0%	5.0%
Using the dictionary	1.5%	2.0%	3.5%

Data revealed that the five most useful strategies applied by participants to minimize grammatical errors and increase accuracy were (a) *reading out loud*, (b) *proofreading by another person*, (c) *memorizing grammatical patterns and rules*, (d) *memorizing example phrases and sentences*, and (e) *using the textbook*. Other strategies—*practice writing sentences, using the internet and Google Translate,* and *learning from error correction*—were all used with equal frequency.

Discussion

Grammatical Errors

The results of this preliminary study suggest that undergraduate L1 English-speaking participants who studied Arabic made a variety of grammatical errors that can be traced, in large part, to intralingual and interlingual transfer. These two kinds of transfer are interrelated, as learners think in English when writing Arabic and compare between the two languages to find similarities or differences, which, in turn, contribute to the learners' ability to make some familiar associations and assumptions. Thus, as learners engage in learning Arabic and increase their competence level, they develop an erroneous intuitive understanding of how the grammar works, create their grammatical system, and apply its underlying erroneous rules in expressing their oral or written messages—hence, in many cases interfering with communication.

Grammatical errors could simply be a result of insufficient time allotted to the teaching and practicing of grammar and writing. Many instructors perceive grammar as a secondary skill, which requires limited attention, and they believe that learners can learn a good deal of grammar on their own (Brown, 2007; Ellis, 2006, 2015; Krashen, 1999). From participants' interviews, it became clear that instructors put more effort on learning vocabulary than on grammar. Instructors use a wide variety of techniques to boost the development of vocabulary, such as drills, flash cards, games, pictures, and songs. In grammar, however, they sometimes give a brief explanation of the topic in the classroom or ask learners to read about it in the textbook. Such methodology and the time-consuming nature of learning grammar could also justify and reinforce learners' unwillingness to study Arabic grammar. Consider, for example, this question posed by a third-year male participant: "Why do we need to learn grammar?" Such a question stems from his experience in English classes in school. In his interview he explained that as a child, he had acquired the language from simply being at home, growing up around the language, and listening to those older than him speak. He made it clear that even though in his English classes in high school the teacher put little emphasis on grammar, he still was able to use the language effectively for communication. Such an argument shows that this participant

did not differentiate between acquiring a mother tongue and learning a foreign language later on. Furthermore, a study that investigated language-learning strategy preferences among undergraduate students who studied Arabic (Brosh, 2019) determined that these students believed that learning vocabulary was more beneficial for them than learning grammar and that with basic grammar and a wide range of vocabulary, they could deliver a sensible message. While this may be true for simple communication in Arabic, nuances in meaning or very specific points are often miscommunicated without the precision of grammar. The students' misperception could result from the fact that some learners find it easier to memorize vocabulary than grammatical rules. One respondent in this study, a second-year female participant, explained: "I don't have problems learning vocabulary. It needs repetition, but it is easy. Memorizing grammatical rules needs much more effort." This comment reveals that certain aspects stick in the mind of learners more than do other aspects. While vocabulary can be slowly developed, grammar remains a topic that must be learned and progressed in the classroom (Loewen, Shaofeng, Fei, Thompson, Nakatsukasa, Ahn, & Chen, 2009).

Additionally, learners may be aware of a grammatical rule but still produce a grammatically unacceptable utterance, also

referred to as a production error. This could result from carelessness or an incomplete application of rules, but it could also result from lack of understanding the causes of errors. Such lack is often fostered when an instructor corrects a learner without ensuring that the learner is aware of what he or she did wrong. Also, many students could be considered as "grade seekers" rather than "real learners." Grade seekers taking a foreign language could be motivated by simply passing a proficiency exam and getting an A in the class. These things could theoretically be accomplished without giving full attention to grammar.

Poor grammatical ability, then, inhibits a learner's capability to fully understand language structures and grammatical rules, thus causing him or her to make grammatical errors. In this way, learners who are unsure how to use a given grammatical structure in Arabic, orally or in writing, are pushed to consult their L1. On the other hand, some participants indicated in their interviews that as learners of Arabic they strive to understand the grammar of the language, and consequently they feel less dependent on their L1. According to one third-year male participant: "When I know how to conjugate a verb correctly, or how to add a pronoun to a preposition, I feel more confident, and I have to think less when I write or speak."

Preposition errors

Despite the limited scope of this article, an in-depth discussion and analysis is appropriate concerning the most common type of error: the use of prepositions. This area is reported to be one of the most difficult and complex mechanisms to master in language learning (Gass et al., 2013). The written data gathered in this study showed that participants made errors by incorrectly using, omitting, or adding prepositions. For native English speakers, the abundance of English prepositions (simple and complex) and the fact that many of them have multiple meanings, depending on the words that follow and the context constitute a hurdle in learning Arabic. Learners face the problem of how to determine the appropriate meaning in Arabic and then use the corresponding preposition. For example, the English prepositions *at*, *on*, and *in* can be used in English with relation to either location or time: *at the university*, *at seven o'clock*, *on Long Island, on Sunday, in Manhattan*, *in the morning*. Hence, while generating Arabic utterances and sentences, participants used an incorrect preposition with a certain noun due to their tendency to apply the direct one-to-one translation strategy. As a case in point, in the sentence <عندما وصلت في الفندق> [*ʕindama waṣalat fi-lfunduq* (“when she arrived **at** the hotel”)], the participant interpreted the meaning of the preposition “*at*” as “*in*” because “*at*” also implies the meaning of “*in*” with relation to place expressions. As a result,

the preposition < في > [*fi* (“in”)] was selected instead of the obligatory preposition < إلى> [*ʻila*], which is required with the verb < وصلت > [*waṣalat* (“she arrived”)].

Respondents also used the guessing strategy when they did not know which preposition to use. A second-year male participant explained: “First, I have to decide if I need a preposition or not. If I decide that I need a preposition and I do not know which one to use, I just guess it. Sometimes I get it right, and sometimes not. When I translate prepositions from English into Arabic, it does not always work. Sometimes I have luck” (see also Gass et al., 2013).
Arabic prepositions are used differently than English prepositions, and participants indicated that this difference is challenging. According to a third-year female participant: “Sometimes I have to stop thinking about what I want to write and start thinking whether or not to use a preposition. And if yes, what preposition to use, and what its meaning is. This is frustrating. I am confused when it comes to prepositions. In English, I say ‘close to’; why in Arabic do I have to say ‘close from’? Sometimes I forget.”

Another difficulty for participants vis-à-vis prepositions is the cross-linguistic differences between the two languages. For instance, the asymmetry between Arabic verbs and English

verbs on whether they connect to their objects directly (i.e., do not require a preposition) or indirectly (i.e., require a preposition). In the sentence <تعرفنا الأستاذ الجديد> [*taʕarrafna-l'ustaadhi-ljadiid* ("We met the new professor")], the participant omitted the preposition due to L1 negative interference. The verb *met* in English does not require a preposition to connect to its object, whereas in Arabic, the verb < تعرفنا > [*taʕarrafna* ("we met")] does require a preposition. Therefore, the correct sentence should include the preposition *ʕala* < على > before the object: < تعرفنا على الأستاذ الجديد>. In some cases, participants added unnecessary prepositions to verbs. For example, in the sentence < ركب على حماره > [*rakiba ʕala ḥimaaruhu* ("He mounted his donkey")], the participant added the preposition < على > after the verb. This error could be attributed to intralingual transfer, since in both Arabic and English, the verbs do not require a preposition to connect to the object.

In other cases, participants used an incorrect form of a preposition. For example, the participants learned that the verb *to have* in English is expressed in Arabic through prepositions. One of them is **<** ل **>** [*li*]. They also learned that a pronoun or a noun could be attached to it. In the sentence < لي دينا عائلة كبيرة> [*lii Dina ʕaa'ila kbiira* ("Dina has a big family")], the preposition < ل > [*li*] should be attached to the

proper noun Dina <لدينا> [*lidina* (“Dina has”)]. The participant did not differentiate between the meaning of < ل > [*li*] when it is followed by a pronoun <لي > [*lii* (“I have”)] or by a noun < لدينا > [*lidina* (“Dina has”)].

The results of this study demonstrate that native English speakers who learn Arabic experience difficulties in achieving grammatical accuracy in writing at the intermediate and advanced levels. These difficulties are mainly related to the use of prepositions. Participants struggled to define their meanings and usage, since the Arabic language system differs significantly from that of English. Native English speakers who learn Arabic are inevitably influenced by their native language; therefore, it is safe to argue they should be made aware that using L1 prepositional knowledge as the transfer from L1 to L2 is not advantageous in many instances.

The results of this study also demonstrate an overall diminishment of grammatical errors between second- and third-year participants in the two most common areas, *prepositions* and *the definite article*. This improvement could well be the effect of an additional year of learning and practicing the language.

Strategies to minimize grammatical errors

The data suggest that participants used a wide variety of strategies, whether at home or in the classroom, to enhance the

production and comprehension of grammatical structures in their oral or written communication tasks. They understood that writing requires grammatical accuracy and clarity in comparison with speaking, where body language and immediate feedback between interlocutors can compensate for incorrect grammar. Participants reported that when they write, they first focus on meaning rather than accuracy to express their ideas; only afterward do they turn to grammatical accuracy. Interestingly, the most commonly used strategy to minimize grammatical errors was *reading out loud*. This is a surprising finding because this strategy is less effective when learners have only a partial knowledge of grammar and limited input. When asked about this strategy, participants explained that sounding phrases and sentences out loud enabled their ears to pick up errors that their eyes did not recognize. They reported that they used this strategy in their English writing, since schools do not emphasize English grammar enough. To compensate for that lack of emphasis, they read aloud, checked what they heard in their heads, and wrote as people talked. Seemingly, since this strategy worked for them in their mother tongue, they transferred it to Arabic learning without noticing that the learning situation was different. When asked about the effectiveness of this strategy concerning Arabic, a third-year female participant explained that she compared the sound of her writing to a few correct sentences or phrases that she had

heard in the classroom from the Arabic teacher or from a video clip and memorized them.

Participants also reported relying on other strategies that reflect instructional practices trying to notice and self-correct grammatical errors, such as cooperation with peers, *proofreading by another person*, *memorizing grammatical patterns and rules*, and *memorizing example phrases and sentences.* A small percentage of participants reported using *comparison with English grammar*, perhaps because they were aware of the grammatical differences between English and Arabic and that though they could speak English correctly, they could not always articulate the grammatical rules of their native language. This finding in a way supports the results of this study that most grammatical errors are attributed to intralingual transfer rather than to interlingual transfer.

Participants also indicated in their interviews that some strategies tend to be more helpful than others in targeting specific errors. Here are some examples. To use the correct preposition, participants tend to ask their peers or use the dictionary or the textbook; memorization and listening help them with word order, gender agreement, and the definite article; concerning word choice, they prefer to ask peers or the teacher. The extent to which learners use grammar correction strategies to target different types of error they make is significant and deserve a study on its own.

Implications

The results of this preliminary study can assist instructors on theoretical and practical levels. On the theoretical level, understanding learners' frequent grammatical errors can provide instructors with insights about the processes of learning grammar and how learners integrate grammatical knowledge in written communication. Similarly, it unveils the extent that learners rely on their mother tongue at any given point in the learning process. The results can also shed light on the strategies employed by learners to learn grammar (see Brosh, 2019) and the strategies they use to prevent grammatical errors.

On the practical level, such an understanding can guide instructors in designing and developing complementary remedial interventions to address grammatical errors and to provide strategies to minimize their occurrence. The area of prepositions, for instance, does not receive the attention it deserves in textbooks and the classroom. Instructors, therefore, need to introduce and systematically have the learners practice the simple and the more complex prepositions, and they need to explain their meanings (semantic and pragmatic), functions, and equivalency to English prepositions while presenting the dissimilarities in use between Arabic and English. Understanding learners' errors can also assist instructors in providing feedback and

methodological guidance in a way that is more applicable and more advantageous to learners. For example, when correcting a learner's error, the instructor should validate that the learner understands the causes for his or her error so as to avoid it in the future. Instructors can also put learners, at all proficiency levels, on a path to recognize and self-correct their errors so as to increase consistency in producing correct Arabic utterances. For example, an instructor can use more authentic printed texts across a variety of genres as well as provide structured opportunities for writing and reading for pleasure. Instructors could also provide learners with opportunities to notice and sort grammatical patterns within communicative tasks (Ellis, 2006; Richards & Reppen, 2014) or use cooperative group projects where learners investigate and share their discoveries about the function and the use of grammatical structures as they appear in particular contexts.

Such interventions can, in turn, help build learners' confidence and inspire them to take risks, to make errors, to correct them and try again, thereby ultimately increasing their motivation to learn the language. Motivating learners to self-correct their errors requires a greater emphasis on systematic instruction of grammar and finding the right balance between teaching grammar and teaching the other aspects of the language, such as reading, writing, and speaking. The goal is not to have

learners memorize grammatical rules in order to recite them but rather to have them understand how grammar is used in real-life communication.

To further develop learners' self-correction capacity, instructors can also do the following:

- Provide learners with error correction activities based on real-life situations and assign the practice of grammatical patterns that facilitate critical thinking (problem solving, didactic games, conversations, role play) inside and outside the classroom. Simply explaining grammatical rules in class or asking learners to read about them in the textbook does not guarantee that learners will be able to successfully apply them in communicative tasks.
- Raise learners' awareness of cross-linguistic differences and similarities between Arabic and English to reduce the L1 level of interference. For example, introduce the differences between Arabic and English concerning adjective placement, noun-adjective agreement, verb-subject agreement, use of prepositions, and so on.

Systematically explain how learners can express in Arabic some English grammatical structures (such as the infinitive) that do not have parallels in Arabic, and have them practice such structures (see also Ringbom & Jarvis, 2009).

- Demonstrate how global grammatical errors can violate the overall structure of a sentence, thereby interrupting communication (Ellis, 2015, Vásquez & Alberto, 2008).
- Increase the amount of comprehensible input through reading and listening, and assign consistent writing practice that draws on grammatical rules.
- Revise teaching strategies to reasonably match the learning strategies of learners as well as expose learners to new strategies for effective grammar learning (see also Batstone & Ellis, 2009; Brosh, 2019).
- Even though many Arabic learners perceive grammar to be valuable and significant for learning MSA (Brosh, 2017), others hold negative views of the efficacy or usefulness of grammar instruction.

Therefore, instructors should continuously motivate learners to practice grammar—for example, by teaching grammar embedded into communicative tasks using a variety of authentic texts (Lee & Valdman, 1999; VanPatten, Williams, Rott, & Overstreet, 2004). Such instruction could generate the learner's commitment and conviction in his or her abilities to succeed in minimizing grammatical errors and to reach the next level of communicative fluency.

Future Research

Surprisingly, little research written in English has explored Arabic learners' frequent grammatical errors as a foreign language. More in-depth, quantitative, and qualitative studies in different language proficiency levels are needed to provide a richer, more detailed picture of the types of grammatical errors and their sources. Another critical question is how and to what extent grammar correction strategies are directly related to grammatical errors learners make. Future studies should include Arabic as a foreign or second language and be combined with an observational measure to provide context to learners' errors and the application of strategies. It is also interesting to further investigate the effect of interlanguage transfer among speakers of other languages (rather than

English) who are learning Arabic. Such studies' outcomes can be translated into possible pedagogical implications and used as an effective platform for remedial interventions.

Summary

This study investigated the types and frequencies of grammatical errors among second- and third-year undergraduate students studying Arabic as a foreign language and the strategies they used to minimize them. Although language experts, as well as students, may debate the role and contribution of grammar within communication-based curricula, the results of this preliminary study suggest that there are predictable and remarkably similar patterns of grammatical errors in the writing of second- and third-year students of Arabic. Since the most frequent errors involved the use of *prepositions*, *the definite article*, *gender agreement,* and *word choice*, instructional grammar strategies that serve to develop learners' grammatical competence and awareness hold great potential in promoting grammatical accuracy. It is understood that placing additional emphasis on grammar from the beginning phases of instruction will not eliminate all grammatical errors. However, attention to grammatical errors and learning grammatical strategies throughout the learning process can make an important contribution to learners. They can develop their grammatical accuracy so they can use Arabic in a way that is

socially acceptable and academically correct across all modes of communication.

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