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Arabic language-learning strategy preferences among undergraduate students

Hezi Y. Brosh
United States Naval Academy, Annapolis, USA
https://orcid.org/0000-0003-4881-425X
brosh@usna.edu

Abstract

This study elicited Arabic students' perceptions regarding their language-learning strategy preferences (LLSPs). A sample of 120 undergraduate Arabic students participated. Data were collected through a questionnaire and interviews. The findings reveal that students tend to adopt a holistic view of the learning task and relate it to real-life, personal experience. Participants selected interaction with the teacher, speaking, and flashcards as their most preferred application-directed learning strategies. These selections demonstrate that Arabic students desire to be proactive in order to make the language more concrete for them, to enhance their performance, and to develop language skills that will last a lifetime. Whereas advanced level participants preferred interaction with the teacher, speaking, flashcards, and working individually, beginner level participants preferred learning grammar and group work. The empirical evidence from this study could have implications regarding theoretical models of effective Arabic language instruction, Arabic teacher education programs, and curriculum development.

Keywords: Arabic language-learning strategies; language-learning strategy preferences; language-teaching strategy preferences; Arabic learning as a foreign language; effective Arabic language learning and teaching; undergraduate students

1. Introduction

Since the mid-1970s, a substantial amount of research in second language acquisition (SLA) attempts to explain how best to teach and learn a foreign language, what factors make learners successful at learning a foreign language, and why some learners are more successful than others. One aspect that has been widely investigated is learners' *learning strategy preferences* (LSPs). The present study is confined to preferred learning strategies used by language learners and, more specifically, by Arabic language learners.

Students in the language classroom have diverse ethnic and cultural backgrounds and varied beliefs. They also utilize particular and distinct learning strategies as their preferred means of receiving, processing, and integrating information (Cohen, 1998; O'Malley & Chamot, 1990; O'Malley, Chamot, Stewner-Manzanares, Russo, & Küpper, 1985; Oxford, 1990; Scarcella & Oxford, 1992). Since students differ from one another and every teaching-learning situation is unique, there are teaching or learning strategies that are considered effective in one setting but that are less effective in another. To accommodate individual students, language instructors have started to develop interactive and communicative teaching approaches and methods. Student-centered instruction has given learners more autonomy and responsibility for their learning and has reduced their dependency on instructors (Cohen, 1984; Oxford, 1990, 2003; Pashler, McDaniel, Rohrer, & Bjork, 2008). This change in teaching philosophy has increased the need to investigate the learning strategies that language students apply both inside and outside the classroom. Scholars believe that language-learning strategies have a significant role in increasing motivation and profoundly influence how learners approach learning tasks (Dörnyei, 2005). Identifying, describing, and classifying these strategies and the ways learners apply them can help explain and predict students' behavior when learning an L2 and the level of success they reach (Kamińska, 2014; Oxford, 1990, 2003).

Despite the considerable amount of studies done on this topic, investigations into *language-learning strategy preferences* (LLSPs) and the ways language learners choose and use their learning strategies are relatively uncommon. Further, investigations Arabic *language-learning strategies,* in particular, are rare if at all exist. Studying Arabic LLSPs is especially significant given the complex task of learning Arabic due to its diglossic nature (see the literature review). To this end, and in order to provide research-based insights into the current learning/teaching process of Arabic thus maximizing its efficiency, this study identifies LLSPs among undergraduate students who study Arabic as a foreign language. It also examines differences in LLSPs based on learning experience – that is, between students who have been studying Arabic for two years or less (Group 1) and those who have been

studying the language for three years or more (Group 2). The results of this study could heighten awareness among Arabic language instructors regarding LLSPs and guide them to formulate a customized, effective teaching plan for their target students in order to facilitate learning and ultimately influence students' academic growth. With regard to possible interactions between strategies used by instructors and students in the classroom, the results could also assist them to modify their respective teaching and learning strategies for better learning outcomes.

2. Literature review

2.1. The case of Arabic

A wide variety of motivations can play an important role in a student's decision to learn Arabic (for more about students' motivations, see Brosh, 2013). Yet, learning Arabic can at times be a daunting, even intimidating endeavor. By and large, Arabic learners expect to become proficient in reading, writing, speaking, and listening in the new language. Achieving that goal requires hours of intense study and comprehensive practice. The learner needs to control a new set of vocabularies and syntactic, morphological, and phonological rules and to decode and match them to a new writing system. The learner has to acquire a new alphabet with its different representations in print and script. He or she has to figure out the direction of writing, the shape of the characters based on their location in the word, and the precise relationship between letters (graphemes) and sounds (phonemes); on top of that, the learner must be able to manipulate these elements in order to read or say words (Stanovich, 1986).

What makes the learning of Arabic even more challenging and time-consuming is the duality of the language (diglossia) – that is, the strong distinction between the standard variety (*fuṣḥa*) or Modern Standard Arabic (MSA), on the one hand, and the spoken one (*ʿammiyya*, or *darija*), on the other hand. Differences between these two varieties are widely exhibited in syntax, morphology, phonetics, and semantics (Bassiouney, 2009; Bateson, 2003). *Fuṣḥa* and *ʿammiyya* are used in different socio-cultural contexts. They function, throughout the contemporary Arab world, in a complementary way: *Fuṣḥa* is used in writing and orally for formal functions, including religious, educational, and other cultural events. In its written form, it is used almost exclusively in any printed publication all over the world. In its oral form, it is used in formal situations, ranging from radio news broadcasts to university lectures to political speeches to mosque or church sermons or such other formal addresses as those at national or international conferences (Bassiouney, 2009).

ʿAmmiyya does not have a script and is not officially written. It is used in casual speech for usual day-to-day activities in such informal settings as home, work, social gatherings, and conversations on the street as well as in all other contexts that do not demand the use of *fuṣḥa* (for an in-depth discussion of diglossia, see Bassiouney, 2009; Brosh & Lubna, 2009; Ryding, 1991).

Additionally, the structural differences between the two varieties, along with diglossic spontaneous switching between them, resulted at some point in the creation and development of intermediate and mixed varieties known as Middle Arabic – also known variously as "Formal Spoken Arabic," "Modern Inter-Arabic Language," "Colloquial Arabic of the Intellectuals," "Intercommon Spoken Arabic," or "Substandard Arabic" (Amara, 1995; Mitchell, 1986; Ryding, 1991). Middle Arabic accommodates the dialects by dispensing with *fuṣḥa*'s complexity of cases and inflectional endings and by borrowing some of the lexical, morphological, and syntactic structures of the regional dialects (Bateson, 2003).

In summary, learning Arabic is by no means an easy task. The foreign language learner of Arabic needs to learn at least two different varieties, the standard and the spoken. Ryding (1991, p. 216) goes even further:

> To achieve "Functionally Native Proficiency," a learner of Arabic as a foreign language must ultimately master at least the three Arabic language variants used by educated Arabs: MSA, FSA (Formal Spoken Arabic) and a regional vernacular.

The following is a brief discussion of language-learning strategies, a meaningful way to approach the complex task of learning Arabic.

2.2. Language-learning strategies

There are numerous ways of characterizing and defining language-learning strategies. Oxford (2017) listed 33 definitions and analyzed them, so before addressing learning strategies deployed by Arabic students, a definition of *learning strategy* is needed. For the utility of the present study, I selected Oxford's (2017) definition that a language-learning strategy consists of specific actions or behaviors consciously selected by the learner and employed in specific contexts to make language learning successful, easier, faster, enjoyable and self-directed. This definition emphasizes the active aspect of language learning strategies and assumes flexibility by the learner to intentionally manipulate them in order to plan for effective learning (for an in-depth review, see Cohen, 1996; Kamińska, 2014; O'Malley & Chamot, 1990; O'Malley et al., 1985; Oxford, 2017).

Cohen (2011) differentiates among three main types of strategies: (a) language-learning and -use strategies; (b) skill-area strategies pertaining to the four

basic language skills; and (c) strategies that are classified according to their function – that is, metacognitive, cognitive, affective, and social (see also Chamot, 1987; Oxford, 1990). Both metacognitive and cognitive strategies incorporate the student's preferred mode of perceiving, reflecting, and retaining information (Chamot, 1987; Cohen, 2012; Ehrman, Leaver, & Oxford, 2003; Ehrman & Oxford, 1990; Grenfell & Harris, 2017).

A metacognitive learning strategy relates to a student's own thinking, planning, and judgment regarding his or her cognitive activities (learning). It includes activities to monitor and assume the responsibility for his or her learning, to reflect, and to evaluate (Cohen, 2011; Grenfell & Harris, 2017; O'Malley & Chamot, 1990; Vermunt, 1996). The ability of a student to reflect and manage effectively his or her own learning is a worthwhile skill to acquire, and it prevents the illusion of knowing something while, in reality, such knowledge does not exist (Pashler, McDaniel, Rohrer, & Bjork, 2008). Furthermore, students with a high level of metalinguistic awareness are more likely to apply the appropriate language-learning strategies that match their learning styles (Cohen, 1998; Oxford, 2003; Scarcella & Oxford, 1992).

A cognitive learning strategy refers to learning processes and behaviors that relate to specific learning activities employed by a student in order to perceive, organize, retain, and use information (Cohen, 2011; Grenfell & Harris, 2017; Vermunt, 1996). Such activities include repetition, reciting, memorizing, summarizing, note taking, substitution, and translation (Grenfell & Harris, 2017; O'Malley & Chamot, 1990; Oxford, 1990, 2003). Since students process information differently, they may favor different cognitive solutions for acquiring and analyzing new data. Some may prefer writing down words or sentences, some may find that they recall new words better when they are associated with images or sounds, and others may desire grammatical explanations. Using strategies in creative ways helps students develop their own individualized approach to learning (Weaver & Cohen, 1994).

Hagino (2002), in her study of 208 Japanese college students, argued that there is no individual student who uses only a single learning strategy. Different learning tasks require the deployment of different learning strategies; thus, a learner uses a group of strategies (strategy chains) to personalize and self-direct his or her own learning experiences (Oxford, 2017). Furthermore, a learner's flexibility to shift strategies when needed in order to match the learning settings, the instructor methodology and the program requirements is advantageous (Weaver & Cohen, 1994). Using a combination of strategies depends on how an individual learner chooses, combines and sequences strategies (Oxford, 1990). Such strategy chains affect the learner's motivation to learn the language and the way he or she acquires, organizes, and integrates new information (Felder & Spurlin, 2005; Kamińska, 2014; Oxford, 2017; Vermunt, 1996).

Other studies have found differences in strategy choice between beginners and intermediate-advanced students. O'Malley et al. (1985), who investigated the range and frequency of learning strategy uses among beginning and intermediate level English as a second language (ESL) students, found that while both groups used cognitive strategies more often than metacognitive ones, the intermediate group showed a tendency to prefer metacognitive strategies. They found that repetition was the strategy used most frequently by ESL students. Sheorey and Mokhtari (2001) found that while beginner level students focused on strategies revolving around repetition, advanced students focused on strategies that showed a deeper understanding of the systematic nature of the target language.

Note that there is no consensus among scholars as to whether or not matching teaching strategies to students' learning preferences can lead to more effective learning and the enhancement of students' motivation to learn the language. Some have argued that such matching can lead to effective impact on learning and academic success, whereas others have questioned that argument due to a lack of sufficient empirical validation; in fact, they have highlighted possible advantages of a mismatch between teaching and learning strategies as they expand the learner's awareness to learning opportunities (Bialystok, 1985; Cohen, 2012; Dörnyei, 2009; Oxford, 2011; Pashler et al., 2008). Though strategies have been extensively studied and discussed, these two conflicting views are still in contention, without clear data that can support one over the other (Kamińska, 2014).

3. Research questions

Choosing and using language learning strategies depends on the learner's purpose in learning the language, among other factors. Since no single set of L2 learning strategies can satisfy all needs of students, it is crucial to identify, assess, and understand students' preferences and how they perceive and interact with both the target language and the learning environment. The aforementioned benefits of learners' individualized usage styles of LLS for more effective language learning have motivated the research undertaken in this study into Arabic learners in the American undergraduate university demographic. This study seeks to explore the following:

1. What are the LLSPs among American undergraduate students who study Arabic?
2. Are there differences in LLSPs between students who have been learning Arabic for two years or less and students who have been learning Arabic for three or four years?

4. Method

4.1. Participants

I randomly selected a total of 120 undergraduate students between the ages of 18 and 23 to participate in the study. The sample was selected using the lottery method, that is, choosing eight out of a total of 15 classes studying Arabic. The participants were L1 English speakers, 66% males, and 34% females in a majority male institution, and for three hours a week they learned MSA as a foreign language. For the sake of this study and for clarity of comparison between novice and advanced participants, I divided the participants into two groups: Group 1 (N = 91), participants who had finished two or fewer years of study, and Group 2 (N = 29), participants who had finished three to four years of study.

In line with the guidelines for ethical research, participants received general information about the study, its aim, its methods, its means of data storage and handling, and the fact that participation was voluntary and could be terminated at any time. After receiving this information, the participants signed a consent form.

4.2. Data collection

I collected the data toward the end of the spring semester in a 2-semester system by means of a questionnaire and follow-up semi-structured interviews.

4.2.1. The questionnaire

The questionnaire listed 24 learning strategies and the respondents were asked to choose their three most frequently used LLS and to rank-order them as 1, 2, and 3. In this preliminary study, a decision was made to have a relatively short list of strategies not exceeding 25. I believe that this number of strategies captures the most commonly used ones and can shed light on trends regarding participants' LLSPs while paving the way for future studies involving additional strategies to explore the distinctive aspects of language. The list featured direct and indirect strategies which were influenced by a variety of factors, such as the learning task, motivation, learning style, culture, personality traits, teacher expectations and more. Some strategies were knowledge-based (such as learning vocabulary and grammar), and others were control-based aimed at practice to develop language fluency (such as speaking and interaction with the teacher). Both kinds of strategies are central to the development of language proficiency (Bialystok, 1985).

These strategies were selected from a larger list of strategies which were drawn from research literature – the *Strategy Inventory of Language Learning*

(SILL; Oxford, 1990) – and from a preliminary poll that asked Arabic language students to rank their three most frequently used LLS (the students who were polled did not participate in the study). The list, therefore, represents a balance between research literature and strategies used by students in the actual process of learning Arabic. The selection of strategies considered the following:

1. Learning Arabic as a foreign language by English speakers requires more of the learner compared to learning other languages such as French or Spanish. Learners have to deal with learning a new alphabet, a new direction of writing (from right to left), new sounds that do not exist in the English sound repertoire, and the root system (construction of words around roots).
2. Strategies should cover the four basic language skills and other areas such as learning pronunciation, vocabulary, and grammar.
3. Strategies should be meaningful and effective as students implied by choosing them in the preliminary poll.

I administered the questionnaire to respondents during class time, and it was answered anonymously. Respondents were not asked to provide any information that could identify them or their educational institution. Furthermore, using paper and pencil ensured confidentiality, which in turn allowed respondents to feel secure and give honest answers.

Choosing this method aimed to force respondents to focus and identify their most frequently used strategies that they apply to learn Arabic as a foreign language and to rank them. Other advantages of this method were the simplicity, the limited time it required from respondents, and the ease in analyzing and categorizing the data, that is, strategies that were ranked first, second, and third, as well the total number of votes each strategy received regardless of rank. Also, answering the questionnaire is assumed to be beneficial for respondents, who were directed to focus on a variety of LLS and to figure out their significance and value for their own learning process. It is important to note that the overall Arabic learning experience of respondents constituted the framework for them to rank-order their three LLSPs.

4.2.2. Semi-structured interviews

I conducted semi-structured interviews with 25 participants representing Group 1 and Group 2 differentiating “newer” and “more experienced” Arabic learners (14 males and 11 females), randomly selected from among the 120 participants to supplement the quantitative data gathered through the questionnaire and to shed light on how Arabic learners express their preferences for LLS. To randomly

select interviewees, 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. The information gathered during these interviews provided insight into the reasons why respondents preferred some strategies over others and revealed further particular themes derived from the findings. An interview guide, which included a predetermined set of open-ended questions, was prepared to prompt discussion that enabled participants to freely express their views and ideas in their own terms and to provide reliable, comparable, and qualitative data. By interviewing Group 1 and Group 2 participants, it was possible to compare perceptions and preferences between the two groups. The interview questions were phrased so as not to affect the interviewees' answers or to lead to specific ones, and they also enabled the interviewer to flexibly probe for details or to discuss issues. Here are a few examples:

- Can you speak about your three most frequently used language-learning strategies?
- Why do you prefer to use these strategies?
- The majority of respondents preferred the *interaction with the teacher*, *speaking*, and *flashcards*. What is your reaction to that?
- Why do you think some respondents select *reading aloud* among their three preferred strategies?
- The results of the study showed that Group 1 differed from Group 2 by showing preference to *interaction with the teacher*. What can you make of this?

The interviews lasted about 15 minutes and were conducted in an informal, friendly atmosphere that facilitated a "natural" flow of ideas and opinions. After greeting the interviewee, the interviewer explained the context and purpose of the interview and asked the interviewee for his or her consent to tape-record the interview. To gain the trust of the interviewees, the interviewer made it clear to them at the beginning that their responses would be kept confidential and anonymous. The interviews started with warm-up questions that were followed by more focused questions taken from the interview guide. The interviews were recorded, transcribed, coded, and organized into themes and categories matching the research questions.

5. Results

Our understanding of cognitive processes and learning is relatively limited due to little research performed; consequently, the empirical evidence provided by this study can indicate only goal-oriented behavior regarding Arabic LLSPs.

5.1. LLSPs

Comparing the percentages of the respondents' ranking of LLSPs allowed the identification of some trends regarding respondents' standard strategy use divorced from a specific learning task or setting.

Table 1 Percentages of student choices of LLS in Arabic (*N* = 120)

		1st choice	2nd choice	3rd choice	Total votes
1.	Interaction with the teacher	14.65	12.20	8.15	35.00
2.	Speaking	13.80	11.40	8.15	33.35
3.	Flashcards	11.40	5.70	7.30	24.40
4.	Pronunciation drills	5.70	8.95	7.30	21.95
5.	Checking homework in class	4.05	6.50	8.15	18.70
6.	Tests and quizzes	5.70	6.50	5.70	17.90
7.	Reading aloud	8.15	3.25	4.90	16.30
8.	Translation from English into Arabic	4.90	3.25	4.85	13.00
9.	Frontal teaching	4.05	4.05	4.05	12.15
10.	Group work	1.60	0.80	8.95	11.35
11.	Field trips	2.45	3.25	4.90	10.60
12.	Working individually	2.45	6.50	3.25	12.20
13.	Correcting sentences on the board	4.05	2.45	2.45	8.95
14.	Working with computers	4.05	3.25	1.60	8.90
15.	Watching movies and video clips	0.80	7.30	1.60	9.70
16.	Learning grammar	1.60	0.00	4.05	5.65
17.	Learning vocabulary through pictures	2.45	6.50	0.80	9.75
18.	Translation from Arabic into English	4.05	1.60	0.80	6.45
19.	Using the Arabic-English dictionary	0.00	0.80	4.90	5.70
20.	Singing songs	1.60	1.60	2.40	5.60

Note. The following LLSPs, where the total votes were under 5%, are not included in the table: spelling practice 4.05%, playing games 3.25%, listening practice (TV, radio, etc.) 3.20%, and chorus 1.60%

Table 1 displays the strategies and the percentage each strategy received being first, second, or third choice. The fourth column presents the total votes each strategy received regardless of rank. The data clearly shows that the majority of participants perceived *interaction with the teacher* (one on one) and *speaking* to be the two most significant LLSPs for them in the Arabic classroom (Strategies 1 and 2). Participants also attributed importance to the use of *flashcards* for learning the meanings of new words as well as to *pronunciation drills* (Strategies 3 and 4).

Interestingly, participants also recognized the importance of *reading aloud*, *translation from English into Arabic*, and *learning grammar*, especially when combined with *correcting sentences on the board*, a strategy that focuses on grammar and vocabulary. The combined total is 14.6%. Strategies that do not contribute directly to the development of communicative skills were less popular.

5.2. Interviews

All interviewees indicated that *interaction with the teacher*, *speaking*, and *flashcards* are among their favored strategies for learning Arabic. They denoted that each one of them contributes to and is geared toward the development of their communicative skills. They explained that they felt secure and comfortable under the teacher's leadership. The teacher made the language and the culture real for them and helped them understand how to use Arabic effectively and correctly outside the classroom. For them, the more they spoke, the more they could "create the language." Eighteen interviewees out of 22 claim that learning vocabulary was a key component to become an effective communicator in Arabic in both speaking and writing. They stated that *flashcards* were an effective and fast strategy to accomplish that goal. Interviewees also indicated the importance of other strategies such as *pronunciation practice*, *reading aloud*, *learning grammar*, and *checking homework in class*.

Each of the aforementioned strategies is addressed in more detail in the discussion section using respondents' quotes. Whereas these quotes could be perceived as part of the results, in this specific study, I found it to be more beneficial for the reader to include them in the discussion section in order to illustrate the arguments made and memorably summarize them.

In general, the interviews showed that respondents tended to view strategies as effective when they perceived them as significantly contributing to the development of language proficiency.

5.3. Differences between the two groups

In order to compare the LLSPs of Group 1 and 2, I computed the frequencies of the various strategies and presented them in percentages. To identify statistically significant differences between the two groups, I used a two-sample *t* test. This statistical procedure compares the mean of one continuous variable between two groups, indicating whether or not there exists a significant probability ($p \leq .05$) of that difference not being the result of chance. To perform this procedure, I graded each strategy on a scale ranging from 0 to 3. The first-choice strategy scored the highest grade, 3; the second-choice strategy scored grade 2; the third-choice strategy scored grade 1; and any strategy not selected scored the lowest grade, 0.

Table 2 Differences in total choices of LLSPs between Group 1 and Group 2 in percentages

		Group 1 (*N* = 91)	Group 2 (*N* = 29)
1.	Checking homework in class	20.90	10.35
2.	Frontal teaching	13.20	10.35
3.	Chorus	1.10	.00
4.	Reading aloud	22.00	.00
5.	Listening practice (TV, radio, etc.)	2.20	6.90
6.	Singing songs	6.60	3.45
7.	Watching movies and video clips	11.00	6.90
8.	Working individually	9.90	17.25
9.	Translation from English into Arabic	12.10	17.25
10.	Translation from Arabic into English	3.30	17.25
11.	Using the Arabic -English dictionary	4.40	10.35
12.	Working with computers	8.80	3.45
13.	Field trips	4.40	17.25
14.	Spelling practice	9.90	3.45
15.	Correcting sentences on the board	9.70	6.90
16.	Speaking	29.70	41.40
17.	Playing games	3.30	3.45
18.	Interaction with the teacher	33.00	48.30
19.	Tests and quizzes	17.60	10.35
20.	Learning vocabulary through pictures	13.20	.00
21.	Learning grammar	6.60	.00
22.	Group work	16.50	3.45
23.	Pronunciation drills	24.20	20.70
24.	Flashcards	20.90	37.90

Table 3 *t* test: significant results comparing Group 1 and Group 2 participants on LLSPs

Strategy		Group 1 (*N* = 91)	Group 2 (*N* = 29)	*t*	*t*-crit	*df*	*p*
Working individually	*M*	1.80	1.00	1.80	2.10	18	.04**
	SD	.91	1.05				
Speaking	*M*	1.96	2.50	2.26	2.03	33	.00**
	SD	1.20	1.15				
Interaction with the teacher	*M*	2.07	2.42	-1.87	1.69	33	.03**
	SD	.67	.51				
Learning grammar	*M*	1.77	.00	5.48	2.30	8	.00**
	SD	.97	.00				
Group work	*M*	1.07	.00	2.95	2.16	13	.00**
	SD	1.18	.27				
Flashcards	*M*	2.21	1.05	3.38	2.03	34	.00**
	SD	.91	1.17				

Note. M = mean, *SD* = standard deviation
* $p < .05$ (confidence intervals: 95%)
** $p < .00$ (confidence intervals: 99%)

A brief glance at Tables 2 and 3 reveals that elementary level respondents (Group 1) and advanced level respondents (Group 2) varied significantly with regard to six LLS. Group 2 differed from Group 1 by preferring *interaction with the teacher*: $t(33) = -1.87$, $p = .03$; *speaking*: $t(33) = 2.26$, $p = .00$; *flashcards*: $t(34) = 3.38$, $p = .00$; and *working individually*: $t(18) = 1.80$, $p = .04$. Group 1 differed from Group 2 by preferring *learning grammar*: $t(8) = 5.48$, $p = .00$; and *group work*: $t(13) = 2.95$, $p = .00$. Additionally, the findings suggest other interesting trends between the two groups and a shift in LLSPs based on the learning experience of respondents. Whereas elementary level respondents put more emphasis on *checking homework in class*, *reading aloud*, and *spelling practice*, advanced level respondents put more emphasis on *translation from English to Arabic* and vice versa, *using the Arabic-English dictionary*, and *listening practice (TV, radio, etc.)*.

In general, understanding the nature of classroom instruction could help us better understand the results. In the educational institution from which the data was elicited, language instruction could be characterized as having a strong emphasis on effective oral and written communication with stress on multicultural awareness and regional expertise. This is in line with the institution's mission and students' goals and expectations. The specific classroom instruction, however, was not investigated.

6. Discussion

The three preferred Arabic learning strategies selected by respondents go hand in hand and reinforce each other. These strategies reflect respondents' desire to use the language as a communicative tool with native speakers rather than learning the language as a body of knowledge to be memorized. It is worth mentioning that participants interpreted and understood the 24 strategies on the list in their own way. The following is a discussion of these strategies and others.

6.1. Interaction with the teacher

In the context of learning Arabic as a foreign language and given the students' goal to be able to communicate with native speakers, participants clearly valued *interaction with the teacher* (as well as *speaking*, addressed specifically in the next subsection), that is, using the language for oral communication. They believed that the teacher was the most proficient speaker that they could have contact with and thus interaction with him or her was viewed as probably the best chance they had to get exposure to the language in a way that was comfortable for them:

> *Talking with the professor and getting feedback is huge for me. In this way, I am forced to create the language and produce sentences that I did not hear before*. (male, fourth year)
>
> *The instructor is very helpful. He explains complex things, repeats words and phrases, and gives examples when needed*. (female, second year)

Participants realized that they could not have such interaction anywhere but in the classroom:

> *No one can give me feedback like I receive from my professor in the classroom. It is of the essence for my progress in the language and for being able to speak it with confidence*. (male, third year)

Additionally, participants believed that the teacher was a safe person to practice with, especially when he or she created a supportive learning environment in which making mistakes was tolerable:

> *My professor told us that he welcomes mistakes but that we have to learn from them. This encourages me to participate more in the classroom*. (male, third year)

6.2. Speaking

Participants believed that speaking practice increased their ability to "create" language:

> *For me speaking in the classroom is an uncomfortable thing to do, but it makes me active in the whole process. I have to think about what I want to say, what words to choose, in which order to put them, and how to pronounce them*. (male, third year)

Participants made it clear that speaking gave them self-confidence and a sense of achievement:

> *I want to speak out loud, because I feel that I can form sentences on my own and deliver my message. People can understand me even if I pronounce words a little bit weird or if I make some mistakes with grammar. This gives me satisfaction and confidence.* (female, fourth year)

Choosing *speaking* (as well as *interaction with the teacher*) as the most effective learning strategies indicates that participants preferred to be actively involved in the learning process in order to develop their language skills and to maximize their efficiency in using the language for communication. They were aware, though, that this process included taking some risks and hard work:

> *Learning a language is learning a new skill. It is like swimming. If I want to be a better swimmer, I have to swim every day. If I want to be better at speaking the language, I need to practice speaking it every day. It is not easy, but it's worth it*. (female, fourth year)

6.3. Flashcards

Choosing learning vocabulary through flashcards feeds into the first two strategies that aim at communication. Because vocabulary is an important component of this process, participants specified that using flashcards was a fast and a convenient way to learn new vocabulary:

> *For me, flashcards are a simple way to learn words and letters. I emphasize things like verbs or nouns with colors, because I am a visual learner. The cards are always with me, so I can practice any time and everywhere*. (female, first year)

Since practice is key to learning the language, flashcards are on target. They aid repetition of words in random order; build connections between spelling, pronunciation, and meaning; and give instant feedback to the learner:

> *Learning vocabulary is the most difficult thing for me, because words are arbitrary, like names. Flashcards help me memorize the meaning of words, their spellings, and also how to pronounce them*. (male, second year)

Flashcards constitute a flexible tool that could be manipulated by learners to answer their specific needs. Participants indicated that flashcards also helped them pick up grammatical structures as they wrote phrases and sentences wherein the words appeared to be in the context of their usage:

> *I find that writing a phrase or a whole sentence rather than just the word in isolation is very helpful for me in learning the word. It is stuck in my memory better. I also learn about grammar and how to use the word*. (female, second year)

6.4. Other strategies

In addition to selecting the foregoing three strategies as the preferred ones, participants were also aware of the value of other strategies in learning Arabic (cf. Hagino, 2002; Weaver & Cohen, 1994).

Pronunciation practice: Five interviewees highlighted *pronunciation practice* as a critical component in the development of language proficiency:

> *Some of the sounds in Arabic do not exist in English. Therefore, you need the practice to train your mouth to make those sounds. Pronunciation is important for effective communication, because if I say a word and they don't understand it, what is the point? Sometimes mispronunciation can also create confusion.* (male, fourth year)

One interviewee mentioned that being aware of the consequences of not properly pronouncing a word in her mother tongue, English, made her recognize the importance of proper pronunciation when learning Arabic:

> *It happened to me several times that I did not understand foreigners because they mispronounced words. Pronunciation is an important skill to have when learning a new language*. (female, third year)

Checking homework in class: Six interviewees emphasized the significance of *checking homework in class* as a way to receive immediate feedback and to force students to look at the corrections in real time, listen to the teacher's explanations, and understand the meaning behind the corrections:

> *When the professor corrects my homework on a piece of paper, this is not enough. I need explanations to understand the meaning behind the corrections*. (male, third year)

> *It is more effective to check homework in class, because it allows students to ask follow-up questions and to listen again to the professor's explanations.* (female, second year)

Furthermore, participants noted that students do not always look at the corrections after class in order to learn from them and avoid similar mistakes in the future:

> *When you check homework in the classroom, you look at the corrections in real time right then and there. When students just get the homework back with all the corrections, they may not look at them later on in the day, because they need the time to prepare the homework for the next day*. (female, second year)

Another interviewee underscored that if homework assignments were checked only in class without its having been submitted to the teacher, then no one would take the homework very seriously, because there would be no consequences for not doing it. On the other hand, he noted, submitting homework and receiving feedback after several days would also not be effective.

Reading aloud: An additional surprising yet interesting finding was the selection of *reading aloud* (16.30% of participants) as an effective strategy for learning Arabic. Although this learning strategy is hardly mentioned in the literature, eight interviewees found it practical for practicing and for activation of

orthographic knowledge, sound correspondences, the pronunciation of words and phrases, and intonation:

> *Reading aloud forces me to read quickly, to put everything together at once – the letters, the sounds, the vowels – and also to pronounce words correctly.* (male, third year)

Another interviewee reported that reading aloud increased students' confidence in their ability to correctly pronounce words, thus making them more willing to take the risk of speaking:

> *Reading aloud is like a pronunciation drill. When I hear myself reading, it gives me satisfaction and confidence that I can say words correctly. This makes me more motivated to speak in the classroom*. (female, second year)

Yet, three advanced interviewees expressed contradictory views:

> *When you read aloud, you mainly focus on the sounds of words, which does not contribute anything to your understanding of the text or to constructing a sentence.* (female, fourth year)
>
> *The professor should not force us to read out loud. When am I going to use this skill outside the classroom?* (female, fourth year)

These interviewees also made it clear that in a classroom setting *reading aloud* might be ineffective for most students, since it targets only one student at a time. The foregoing views may point to participants' perception that *reading aloud* is mostly effective as a drill to improve their pronunciation and intonation and thus enhance the speaking skill.

6.5. Differences between Group 1 and Group 2

Interaction with the teacher and *speaking*: Advanced students attributed more value to *interaction with the teacher* and *speaking* than beginners. Advanced students find the teacher as the most proficient speaker they could interact with:

> *Only in the classroom could I interact with a person, the professor, who masters the language and who is ready to help me improve my speaking skill.* (male, fourth year)

Advanced students already knew the basics of the language, and their main barrier was using the language for communication. They understood that this was their weakest area, and that is where they wanted to improve and learn:

> *I try to take advantage of any opportunity to practice speaking. Such opportunities are very limited, though.* (female, third year)

When advanced students compared interaction with classmates versus interaction with the teacher, they clearly favored interaction with the teacher:

> *When you interact with your classmates, you know what they know. You might also hear and make mistakes. But when you interact with the professor, you might be corrected and exposed to new words and phrases.* (female, third year)

Another explanation could be that the complexity level of the materials at the beginning phases was not that difficult, and therefore reliance on the teacher was less critical. At the advanced level, however, the complexity of the materials had grown and a higher level of accuracy and fluency was required; therefore, advanced participants felt the need to interact with the teacher:

> *The grammatical structures and the verbs are getting more complex every day, and in order to speak and write with fewer mistakes, I really need the help of the instructor.* (male, fourth year)

Along the same lines, the ability to conduct a meaningful conversation at the advanced level was more realistic than it had been at the beginning level:

> *I don't think that conversations are the most helpful thing for me, because I don't know enough vocabulary to really have a good conversation. When the professor conducts a conversation, I feel that I am trying more to just think of words that I know to throw into a sentence than actually trying to communicate something in Arabic.* (male, second year)
>
> *I sort of get discouraged when I try to say a sentence in Arabic and realize that I don't know most of the words, so I never enjoy having a conversation.* (male, first year)

Two interviewees, however, expressed a different opinion. According to them, *interaction with the teacher* was a key segment and a vital strategy for beginners to learn the language; according to them, beginners do not have enough tools to study the language on their own. Advanced learners, on the other hand,

> *should not enormously rely on the professor, as the beginners do. In my opinion, advanced students are independent enough and have the tools needed to work on their own and improve.* (male, fourth year)

Learning grammar: Beginners attributed more significance to learning grammar than the advanced learners. Perhaps beginners realized that without basic grammatical

knowledge, it would be difficult to construct a sentence or understand one; thus, they felt less confident in speaking:

> *I don't want to speak out loud, because I don't know if I can form sentences correctly. I don't want to sound stupid.* (female, second year)

Advanced students, on the other hand, believed that delivering the message was more important than being grammatically correct. They felt that they could form a bunch of sentences with the block of grammar knowledge they already had, and that is why they needed more vocabulary. It was more practical for them toward achieving their goal, communication:

> *If I am stuck in an Arabic-speaking country, then the grammar is not the most important thing for me. I can deliver the message even with some grammar mistakes. What I need at this point is vocabulary.* (male, fourth year)
>
> *Grammar comes with practice, and the more I practice, the more I learn how to structure a complex sentence.* (female, fourth year)

Another study, however, found that advanced students were interested in learning grammar because in the advanced phase, they needed to sound more eloquent and accurate (see also Brosh, 2017).

Flashcards: Advanced learners attributed more weight to flashcards than beginners, perhaps because beginners tend to be overwhelmed with new characters, new sounds, new vocabulary and how to construct sentences. Additionally, beginners' need for vocabulary was restricted to such basic topics as introducing themselves and their families. However, all the advanced learners needed was more vocabulary, which they could use for communication. They wanted to speak and opine about a variety of topics, such as economics, politics, the news, and their careers. Thus, expanding their actual vocabulary base brought advanced learners satisfaction:

> *I enjoy studying vocabulary, because knowing how to say a lot of words in Arabic is more enjoyable, more rewarding. When I learn vocabulary, I feel that I have actually been learning some stuff.* (male, third year)

Since the amount of new vocabulary at the advanced level grows significantly, the flashcard strategy seemed to be the most effective for advanced participants:

> *In the advanced level, the number of new words is huge, and it takes hours and hours to memorize them, so using flashcards to target a few words at a time seems to be a fast and efficient strategy.* (female, fourth year)

Group work versus *working individually*: Beginners favored *group work*, whereas advanced learners preferred *working individually*. This difference can simply be explained by comparing the level of knowledge and confidence each group has. Moreover, the motivation of beginners to work in groups was due to their perception that the task at hand could be accomplished more easily and effectively when all of them worked together and pooled their knowledge. Beginners generally had the same skill level in understanding the language, so in a group setting they all could, most likely, contribute about the same amount of knowledge and work to the task. In contrast, advanced learners, who had been studying the language for three or four years, differed significantly from one another in their ability, based on how much they had been passionately devoted to learning the language and how much effort and time they had put into it. So, when advanced participants come together to work in a group,

> *there is going to be a very clear leader, who is going to do most of the work, while others will contribute only a little.* (male, fourth year)

That made group work less effective for many members of the group. Furthermore, advanced learners were aware of their weaknesses and wanted to work on them individually, without being distracted or embarrassed by others:

> *If I work with someone who knows tons of words but is weak in grammar, whereas my grammar is strong but I don't know all the words, when we get together to do an assignment, he still does not know the grammar, because I did it all, and I still don't know the words, because he did them all.* (female, fourth year)

7. Implications

The findings from this study could have implications regarding theoretical models of effective language instruction, language teacher education programs, and language curriculum development. The findings indicate that learning Arabic with the goal of being able to use it for communication, in and out of the classroom, involves the use of a combination of strategies:

> *When I learn Arabic, I combine and use different strategies. For example, I will learn a thing much faster if I see it, listen to it, write it, and think about it than if I utilize only one of these strategies.* (female, first year)

Students are by nature linguistically and culturally diverse – and thus different – in their perceptual learning strategies, how quickly they can adjust to new strategies, and the amount of practice they need. They are aware that there is no single learning-strategy recipe for learning Arabic. Moreover, they are also aware that learning strategies differ within the student him- or herself. Whereas learning a certain aspect of a language, such as vocabulary or grammar, may come easy for an individual student, learning other aspects of the language may be much harder. Recognizing these individual patterns and variability can lead Arabic instructors to develop and design complementary instructional interventions to address individual students' learning needs, thereby using classroom time more effectively. These results could also guide instructors to develop a comprehensive teaching model that can match to a reasonable extent a variety of students' learning strategies (Oxford, 2003), enhance student achievement rates, and provide a foundation for students' lifelong learning. On the other hand, though it is extremely helpful to have a knowledgeable and capable instructor, if students are not motivated to identify and utilize their learning strategies, or if they oppose the teaching strategies applied by the instructor, rightly or wrongly, because, for example, they are convinced that such strategies focus on knowledge rather than on practice or vice versa, or for any other reason, then learning will produce only limited outcomes.

The principal result from this study indicated that undergraduate Arabic students who study the language in order to be able to use it for communication with native speakers, concentrated on strategies that help them become autonomous learners (Oxford, 2017) and move them toward the end goal of their learning: speaking for communication. They perceived speaking as a practical application of the language, and they wanted to develop their ability to the level where they could deliver their messages even without an adequate mastery of grammar. Since students may learn in unanticipated modes (Pashler et al., 2008), an instructor who keeps teaching only in ways that are comfortable for him- or herself might leave many students behind, to struggle with learning the material on their own. Thus, responding to students' strengths and weaknesses, and understanding how an individual student would be most receptive to Arabic instruction, will help instructors design a well-rounded teaching methodology pertinent to their students' expectations for interpersonal communication. Research suggests that a teaching strategy that matches or addresses a student's learning strategy to a reasonable degree can result in higher learning quality, motivation to learn the language, feelings of independence, and confidence in one's abilities to succeed (Oxford, 2003). Participants' strong preference toward speaking made it apparent that teaching strategies should provide students with ample opportunities to use the language and to be proactive. When instruction

offers a variety of venues to use the language orally, and is aligned with students' learning strategies, students can assign a suitable priority to the material being taught, can have a clear idea of where the instructor is heading, and can know what to expect from the lesson. Such instruction could create an effective and engaging learning environment, increase each student's motivation, and thus generate the student's personal commitment and confidence in his or her abilities to succeed in learning the language (O'Malley & Chamot, 1990):

> *I had a professor whose teaching strategies aligned closely with how I wanted to learn, and I paid close attention to that class and got good grades. But the next semester I had a class where I didn't like how the professor presented the materials, and that's when I started not paying attention, and my grades started to decline as well.* (female, second year)

Alignment between teaching strategies and learning strategies is desirable; however, it is not always realistic. In a typical Arabic classroom, students vary greatly in a wide range of learning strategies as well as in the level of confidence with which they process and apply them, so it is extremely difficult and challenging for an instructor to teach according to each student's preferred method. In any event, an instructor should not be reluctant to train and expose students to useful learning strategies that do not necessarily accommodate their Arabic LLSPs but are nonetheless essential to the development of their language skills. Indeed, such exposure revitalizes students' attention, forces the students to familiarize themselves with and acclimate themselves to teaching strategies that might be beneficial to them even though out of their comfort zone.

Choosing *interaction with the teacher* as the most preferred learning strategy emphasizes the essential role of instructors as facilitators who need to assist their students in becoming more autonomous and proficient in learning the language (Oxford, 1990; Weaver & Cohen, 1994). That choice also implies the extent of the instructor's influence over the students' learning process is perhaps even greater than the instructor realizes. Such influence should be utilized to empower and motivate students to study Arabic on their own beyond the classroom in order to move forward in their language learning (Weaver & Cohen, 1994).

8. Limitations

This study has three limitations that should be acknowledged. The first one has to do with the questionnaire. It did not provide information about how a strategy preference was influenced by specific L2 learning tasks that participants faced, and thus, perhaps, decreased the significance of the results. Unfortunately, it was almost impossible to ask participants to explain their LLSPs across

the manifold possibilities of language-learning tasks. The questionnaire also did not provide information about the reasons participants preferred one strategy over another. To compensate for these limitations, I conducted a relatively high number of semi-structured interviews with participants.

The second limitation has to do with a difference concerning the population of the two groups. Group1 (first and second year) was a mixture of students: those who planned to continue their Arabic studies beyond the second year, on the one hand, and those who were studying Arabic just to fulfill the two-year language requirement for their majors, on the other hand. In contrast, students in Group 2 (third and fourth year) had chosen to continue their Arabic studies beyond the second year, based on their personal drive; as a result, they could be more passionate about learning the language and thus ready to make the extra step in order to accomplish their language goals. Nonetheless, I found other differences between beginners and advanced students with regard to LLSPs significant.

The third limitation, which does not affect the results of the study and stems from the limited scope of this article, is the lack of an in-depth examination of oral feedback when discussing the strategy called *interaction with the teacher.* The issue of *feedback* is a vast and significant one in L2 teaching and learning. The reader can find more details on feedback in Loewen (2012).

9. Future research

To better understand how Arabic students, discover, choose, and apply learning strategies, further research on Arabic LLSPs is required. More specifically, empirical data are needed to answer such questions as the following: What principles and phenomena underlie Arabic students' LLSPs?, are students actually using the strategies they self-report as their preferences, and to what extent?, how are LLS used in specific language tasks? and how does using a given LLS enhance a student's learning experiences and ultimately lead to the development of his or her language proficiency? Additionally, Arabic instructors' language-teaching strategy preferences should be examined in terms of range, type, and usage frequency to obtain an accurate profile of such strategies and to reveal the extent to which they correspond with students' LLSPs.

10. Conclusion

In the context of learning Arabic as a foreign language and within the constraints of a conventional classroom, the empirical evidence from this study shows that undergraduate Arabic students tend to adopt a holistic view of the learning task and relate it to real-life, personal experience. By selecting *interaction with the*

teacher and *speaking* as their two most preferred application-directed learning strategies, Arabic students clearly demonstrate their desire to be proactive in order to make the language more concrete for them, to enhance their performance, and to develop language skills that will last a lifetime. Students are aware that learning Arabic requires application of a wide variety of learning strategies to accomplish different learning tasks (written or oral production) and to manage and organize their learning. To expand students' awareness of how Arabic as a foreign language is efficiently learned, instructors should provide guidance regarding the suitability of strategies to learning tasks and topics being studied and how to incorporate these strategies into students' daily learning routines inside and outside the classroom. In this way, while maximizing students' level of comfort in learning the language, instructors could also challenge them academically and ultimately stimulate their language skills. In addition, Arabic instructors should adopt a multifaceted view of instruction that is responsive to students' learning strategies, needs, and interests so as to allow them the flexibility to navigate through the language. The application of diversified channels through which information streams into the Arabic language classroom could help students review their progress, achievements, and future learning directions.

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