

Instrument to Measure Identity Motivation in Arabic Second-Language Learners

Danya A. Shaalan*

Department of Applied Linguistics, College of Languages, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia

Badriyya B. Al-onazi

Department of Language Preparation, Arabic Language Teaching Institute, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia

Alya K. Alshammari

Department of Applied Linguistics, College of Languages, Princess Nourah bint Abdulrahman University, Riyadh, Saudi Arabia

Abstract—Research in second-language (L2) learning has revealed that aspects of identity can be strong drivers of L2 motivation. L2 Arabic learning research shows that Arabic, Middle Eastern, and Muslim identity may play a special motivational role, as Arabic is both a heritage language (HL) and a liturgical language (LL). The Kingdom of Saudi Arabia (KSA) has Arabic language institutes (ALIs) which offer L2 Arabic learning programs to scholars from outside KSA. Our aim was to revise, pilot, and assess the validity and reliability of an existing instrument to measure identity-related motivation to learn L2 Arabic in a sample of L2 Arabic learners at three KSA ALIs. We obtained instrument data from 98 learners (13% Arab, 11% Middle Eastern, and 97% Muslim), and conducted factor and other analyses to assess validity and reliability and confirm subscales. The most common languages of fluency were English (74%), Arabic (62%), any African language (40%), and any Indian language (21%). We found evidence of both reliability and validity, and identified four subscales as sources of L2 Arabic motivation that were slightly different than the original instrument: Islamic faith, for cultural exposure, for instrumental purposes, and to better understand Arab problems/politics. Subscale scores were highest (indicating stronger source of L2 motivation) for Islamic faith and cultural exposure, and lowest for Arab problems/politics. We include the final instrument and recommend that it be the subject of future studies aimed at increasing its validity and reliability, and assessing its performance in various groups of L2 Arabic learners.

Index Terms—Arabic, heritage and minority languages, multiple identities, Muslim, survey methods

I. INTRODUCTION

Several theories dominate the field of research into second-language (L2) motivation, or motivation to learn a second language. Gardner (2000) described “instrumental motivation”, which he defined as, “studying the second language for the practical advantages of doing so”, such as to be able to use it for employment or studying in college (p. 16), as well as how the attitude toward the learning situation could influence motivation. In his theory called the L2 Motivational Self System (L2MSS), Dörnyei described the concept of “future selves” that are imagined by the L2 learner, where they eventually become proficient in the L2 they are studying (Dörnyei, 2009). Researchers have developed instruments to measure such L2 motivations in learners (Al-Musnad, 2018; Gardner, 2000; Taguchi et al., 2009; Tremblay, 2020).

Applying this knowledge of L2 motivation to the learning of second-language Arabic can be challenging, as past studies have focused on L2 English learners (Moskovsky et al., 2016; Subekti, 2018; Taguchi et al., 2009). What influences L2 motivation may differ depending upon the L2 being learned, so what motivates learners toward L2 English will likely be different than what inspires learners to acquire L2 Arabic (Aladdin, 2010; Al-Hoorie et al., 2021). L2 motivation for the same language may also differ by subpopulations learning the language, as is seen in the differences between L2 motivation reported in a study of United States (US) college students learning Arabic compared to those from a study of non-Muslim Malaysians (NMMLAs) learning Arabic in Malaysia (Aladdin, 2010; Hussein, 2005).

Studies of L2 English learners that measured L2 motivation could not explore all the constructs associated with L2 motivation to learn Arabic. For example, in one study of Saudi English as a Foreign Language (EFL) learners, researchers developed an instrument to measure L2 motivation arising from the concept of future selves from the L2MSS (Moskovsky et al., 2016). Because these were Arabic-speakers learning L2 English, measuring the influence of Arabic, Islamic, or Middle Eastern identity as a source of motivation for choosing to study L2 English does not have an

* Corresponding Author.

apparent rationale, so instruments have not been developed for this. On the other hand, non-Arabic-speakers learning L2 Arabic may be motivated by their identification with these various identities (Husseinianali, 2005). Because learning L2 English is much more common than learning L2 Arabic, and because of a predominance of the L2MSS as a theory behind identity-related L2 motivation, few instruments have been developed to measure identity-related L2 motivation to learn Arabic (Husseinianali, 2006).

Our research focuses on motivations for L2 learning of Arabic in the Kingdom of Saudi Arabia (KSA). The following sections examine spoken language and L2 Arabic learning in KSA, as well as research findings on the connections between L2 Arabic learning and identity.

A. Spoken Language in the Kingdom of Saudi Arabia

Arabic is the official language of the KSA, but in an attempt to be consistent with world economies, KSA business is transacted in English. Because of this, there are many Saudi L2 English learners in KSA, and there are also many KSA-based studies arising from samples of these groups (Albahlal, 2019; Al-Qahtani, 2020; Moskovsky & Alrabai, 2009; Saudi Vision 2030, 2020). Today, more Saudis realize that English is an important asset for success in higher education (especially if studying outside KSA), and to achieve access to highly prestigious occupations (Faruk, 2013). Therefore, currently, Saudis' attitudes toward English are highly positive, because most of them believe that knowing English is necessary for navigating different domains, and is vital to KSA's growth and prosperity (Moskovsky & Alrabai, 2009).

In addition to the Saudis, there are many expatriates (non-Saudis) working in KSA who may not know L2 Arabic, and these groups have been the subject of only a few studies on L2 Arabic acquisition in KSA (Abdelhalim & Alqubayshi, 2020; Al-Musnad, 2018). In terms of sources of L2 motivation, these studies revealed learners had instrumental motivation, and were motivated by wanting to learn about KSA culture and wanting to communicate with and understand the Saudi people (Abdelhalim & Alqubayshi, 2020; Al-Musnad, 2018). They were also motivated to learn L2 Arabic through wanting to be able to read the Holy Quran (Abdelhalim & Alqubayshi, 2020; Al-Musnad, 2018).

B. Arabic Language and Identity

Studies have been conducted on how the speaking of Arabic is connected with Arab, Middle Eastern, and Islamic identities. Those who identify as Arab or who otherwise have family ties to the Middle East were the target audience of the writings of Sati' al-Husri (1880-1967), who was a strong proponent of Arab nationalism (Salameh, 2011a). He advocated for a framework where the definition of Middle Eastern and Arab were interchangeable, essentially arguing that by definition, there were no non-Arabs in the Middle East (Salameh, 2011b). He has been quoted as saying, "You are an Arab if I say so!" (Salameh, 2011a). It is under this framework that he encouraged everyone he defined as Arab to learn and start communicating in Arabic, so these people could unite under "one Arabic" (Salameh, 2011a). Not surprisingly, this contention is rejected by many, simply because there are many Arabic dialects and not "one Arabic", there are indeed non-Arab others, and in the Middle East, there is polyglossia, which is also seen as a rich contribution to society (Salameh, 2011a, 2011b).

The speaking of Arabic and Islamic identity has also been the subject of study. Jaspal and Coyle (2010) researched the identity of British-born second-generation South Asians (SGA). They defined the term heritage language (HL) to mean the language associated with their ethnic culture (e.g., Hindi), and liturgical language (LL) to mean language used for religious purposes (e.g., Arabic for Muslims, and Gurmukhi for Sikhs) (Jaspal & Coyle, 2010). This line of research found L2 motivation having to do with religious identity, as well as identity conflicts (Jaspal & Coyle, 2010; Moraru, 2019; Rosowsky, 2005, 2021).

C. Arabic Language Institutes in the Kingdom of Saudi Arabia

KSA has a series of L2 Arabic language institutes (ALIs), including the Arabic Language Teaching Institute at Imam Mohammed Ibn Saud Islamic University (Imam-ALI) (Abdelhalim & Alqubayshi, 2020), the King Abdulaziz University Arabic Language Institute (KAU-ALI), and the Arabic Teaching Institute for Non-Arabic Speakers at Princess Nourah bint Abdulrahman University (PNU-ALI). All three are in Riyadh, and while KAU-ALI and PNU-ALI only serve female learners, Imam-ALI only serves male learners. These institutes aim to develop students both educationally and personally through various specialized programs, teaching plans, and workshops. In addition, these institutes aim to develop students' Arabic language for both general and specific purposes. Among other offerings, the ALIs have a primary Diploma Program which delivers instruction over two years with an objective of developing learners' competency in Arabic to the level that they can participate in higher education delivered in Arabic. Learners are typically non-Saudis studying in KSA on government scholarship.

We would like to better understand identity as a potential source of L2 motivation behind learners at KSA's ALIs. We sought to develop an instrument that could measure how Islamic, Arab, and Middle Eastern identities relate to Arabic L2 motivation of learners at KSA ALIs, as all of them are expected to be non-Saudi, but possibly a mix of these other identities ("identity motivation"). In this pilot study, our aim was to revise, administer, and assess the validity and reliability of an instrument to measure identity-related motivation to learn L2 Arabic in a sample of L2 Arabic learners at KSA ALIs.

II. MATERIALS AND METHODS

Based on published L2 motivation research in the scientific literature, we developed an online anonymous survey that included demographic questions and an adaptation of a published instrument to measure Arabic L2 identity-motivation. This survey was administered to a sample of learners from Imam-ALI, KAU-ALI, and PNU-ALI. Data analysis was conducted to evaluate the validity and reliability of the adapted identity-motivation instrument in the current sample. Based on these results, subscales and related items were proposed, and subscale scores were calculated to describe the sample. Details are provided below.

A. Identity-Motivation Instrument Development

We based our identity-motivation instrument on one previously developed by Husseinali (2006) for measuring identity-motivation in L2 Arabic learners at five US universities. In the instrument, respondents rated their level of agreement with statements giving reasons for learning L2 Arabic, such as, “So I will be able to understand and appreciate Arabic art and literature,” on a scale from one to seven, where one represented strongly disagree, and seven represented strongly agree. In this article, the author conducted factor analysis on 16 original items, and concluded that in this particular sample, there arose three factors comprised of 13 items: travel and culture orientation (four items), instrumental orientation (four items), and identification orientation (five items), with the remaining three items not loading (Husseinali, 2006). We adapted this 13-item instrument to be used on L2 Arabic learners at KSA ALIs (see Table 2 for item wording).

B. Participants, Setting and Data Collection

An anonymous survey asking for demographic information and the items on the identity-motivation instrument was programmed into online survey application SurveyMonkey. A link was distributed to learners at Imam-ALI, KAU-ALI, and PNU-ALI who were either currently in the diploma program (KAU-ALI $n = 43$, Imam-ALI $n = 105$) or were alumni of the program (PNU-ALI $n = 98$). Teachers at KAU-ALI and Imam-ALI established a social media group in the application WhatsApp of current diploma students, and PNU-ALI maintains a WhatsApp group of diploma alumni. These WhatsApp groups were used to distribute the anonymous survey link to current students during regular L2 Arabic classes, and to alumni. The students were asked to complete the survey either during or after class within the next week, and the alumni were asked to complete the survey within the next week.

C. Data Analysis

Data were analyzed in R (R Core Team, 2021). First, demographic variables underwent descriptive analysis. Next, to evaluate validity, factor analysis was conducted, where the *principal* command from the *psych* package was used with the varimax rotation to compare the alignment of factor loadings seen in the original article to the ones seen in this sample (Revelle, 2022). To evaluate reliability, the *alpha* command from the same package was used to calculate Cronbach α scores for groups of items loading on factors, with 0.70 and above being considered acceptable, consistent with the literature (Dörnyei, 2007). Distributions of raw answers to items were visualized using the *likert* package (Bryer & Speerschnieder, 2016). For factor analysis, three-factor, four-factor, and five-factor models were all attempted, and the one felt to fit the data best was selected. To assist in model selection, the package *nfactors* was used to run a scree plot (Raiche & Magis, 2020). Based on all these results, final decisions were made as to which items to retain in the instrument, and on which subscales to place them. Subsequently, summary scores were calculated by summing the results of items on each subscale. An analysis of variance (ANOVA) was used to compare mean scores from the three participating ALIs (with α set at 0.05).

III. RESULTS

As described earlier, a total of 246 survey links were sent, and a total of 140 anonymous surveys were received electronically from respondents at KAU-ALI, PNU-ALI, and Imam-ALI, for a response rate of 57%. For the analysis, 42 were removed due to missing data, leaving 98 surveys available (see Table 1).

A. Demographics

As shown in Table 1, respondents from KAU-ALI ($n = 12$, 12%) and PNU-ALI ($n = 49$, 49%) were all female, and respondents from Imam-ALI ($n = 37$, 38%) were all male except for one, which may be due to the wife or a female family member completing the survey on behalf of the male learner.

TABLE 1
DEMOGRAPHICS

Category	Level	All n, %	Site**		
			KAU-ALI n, %	PNU-ALI n, %	Imam-ALI n, %
All	All	98, 100%	12, 12%	49, 50%	37, 38%
Gender	Male	36, 37%	0, 0%	0, 0%	36, 97%
	Female	62, 63%	12, 100%	49, 100%	1, 3%
Age group (years)	18-24	45, 46%	5, 42%	16, 33%	24, 65%
	25-34	49, 50%	7, 58%	30, 61%	12, 32%
	35-64	4, 4%	0, 0%	3, 6%	1, 3%
Marital status	Married	39, 40%	8, 67%	23, 47%	8, 22%
	Never married	58, 59%	4, 33%	25, 51%	29, 78%
	Divorced or widowed	1, 1%	0, 0%	1, 2%	0, 0%
Ethnic/religious*	Identify as Arab	13, 13%	1, 8%	6, 12%	6, 16%
	Identify as Muslim	95, 97%	11, 92%	48, 98%	36, 97%
	Identify as Middle Eastern	11, 11%	2, 17%	5, 10%	4, 11%
Language fluency	Any African language	39, 40%	8, 67%	9, 18%	22, 59%
	Any Chinese language	2, 2%	0, 0%	2, 4%	0, 0%
	Any Indian language	21, 21%	0, 0%	17, 35%	4, 11%
	Arabic	61, 62%	3, 25%	34, 69%	24, 65%
	English	73, 74%	5, 42%	37, 76%	31, 84%
	French	13, 13%	1, 8%	1, 2%	11, 30%
	German	3, 3%	0, 0%	2, 4%	1, 3%
	Spanish	2, 2%	0, 0%	0, 0%	2, 5%
	Fluency in any of above languages	89, 91%	9, 75%	46, 94%	34, 92%
Parents speak Arabic?	One speaks fluent Arabic	31, 32%	1, 8%	20, 41%	10, 27%
	Both speak fluent Arabic	5, 5%	0, 0%	3, 6%	2, 5%
Intensity of Arabic study	Enrolled in formal Arabic language learning program	62, 63%	12, 100%	21, 43%	29, 78%

* None of the respondents identified as Saudi. ** KAU-ALI: King Abdulaziz University Arabic Language Institute, PNU-ALI: Arabic Teaching Institute for Non-Arabic Speakers at Princess Nourah bint Abdulrahman University, Imam-ALI: Al-Imam Muhammad Ibn Saud Islamic University.

Half (50%) of respondents were aged 25-34 years, and over half (59%) were not married. In terms of ethnicity, as expected, none of the respondents reported being Saudi, but 11% identified as Middle Eastern, 13% as Arab, and 97% as Muslim. In terms of fluency in other languages, the most common language reported was English (74%), followed by Arabic (62%), any African language (40%), any Indian language (21%), and French (13%). In terms of parental fluency in Arabic, in almost one third of respondents (32%) reported having one parent who speaks Arabic fluently, and 5% reported fluency in both parents. Over half (63%) reported currently being enrolled in a formal Arabic language learning program.

B. Factor Analysis Results

Factor analysis results for the adapted identity-motivation instrument are presented in Table 2, where a four-factor model was selected.

TABLE 2
FACTOR ANALYSIS RESULTS FROM ARABIC SECOND-LANGUAGE IDENTITY-MOTIVATION INSTRUMENT

Item Wording	Code*	Four-factor Model			
		RC1	RC4	RC3	RC2
Because I want to be able to use Arabic with Arabic-speaking friends. ¹	Instrument2	0.55	0.62	0.12	0.15
Because of my interest in Arab culture. ¹	Culture4	0.74	0.18	0.39	0.17
Because of my interest in Islamic heritage. ¹	Islamic1	0.18	0.02	0.20	0.88
Because of my interest in Islam as a world religion. ¹	Islamic2	0.18	0.17	-0.14	0.89
So I will be able to understand and appreciate Arabic art and literature. ¹	Culture1	0.67	0.22	0.22	0.35
Because I want to use Arabic when I travel to an Arab country. ²	Instrument1	0.42	0.76	0.17	0.15
Because I plan to study abroad. ²	Instrument3	0.19	0.72	0.41	0.05
So I will be able to meet and converse with more and varied people. ²	Culture2	0.83	0.33	0.08	0.11
Because I want to learn more about other cultures to understand the world better. ²	Culture3	0.75	0.37	0.17	0.12
Because I feel Arabic is an important language in the economic development of the world. ³	Did not load	0.56	0.45	0.21	0.14
Because I feel Arabic will help me better understand the Middle East politics. ³	Politics2	0.18	0.30	0.87	0.03
Because it will help me better understand the problems that Arabs face. ³	Politics1	0.29	0.26	0.85	0.04
Because I think it will be useful in getting me a good job. ³	Instrument4	0.32	0.68	0.28	0.06

* This code is used to indicate which subscale the item was placed on for scoring based on factor analysis results. Bolded value indicates how item was selected for factor. The four-factor model rendered factors RC1-RC4. RC1 was labeled "motivation for cultural exposure", and consists of items Culture1-4. RC4 was labeled "instrumental motivation", and consists of items Instrument1-4. RC3 was labeled "motivated to understand problems/politics", and consists of items Politics1-2. RC2 was labeled "Islamic motivation", and consists of items Islamic1-2. 1 indicates that item was originally placed on "Identification" subscale, 2 indicates item was originally placed on "Travel and Culture" subscale, and 3 indicates item was originally placed on "Business/Instrumental" subscale, per original article by Husseinali (2006).

In Table 2, the wording of each item is listed, and the subscale on which each item was placed in the original article is noted (Husseinali, 2006). As can be seen by Table 2 and the scree plot in Figure 1, a four-factor model seemed reasonable for these data, although loadings on the four factors did not align at all with the three subscales from the original article, and one item did not load on any factor (see Table 2).

Non Graphical Solutions to Scree Test

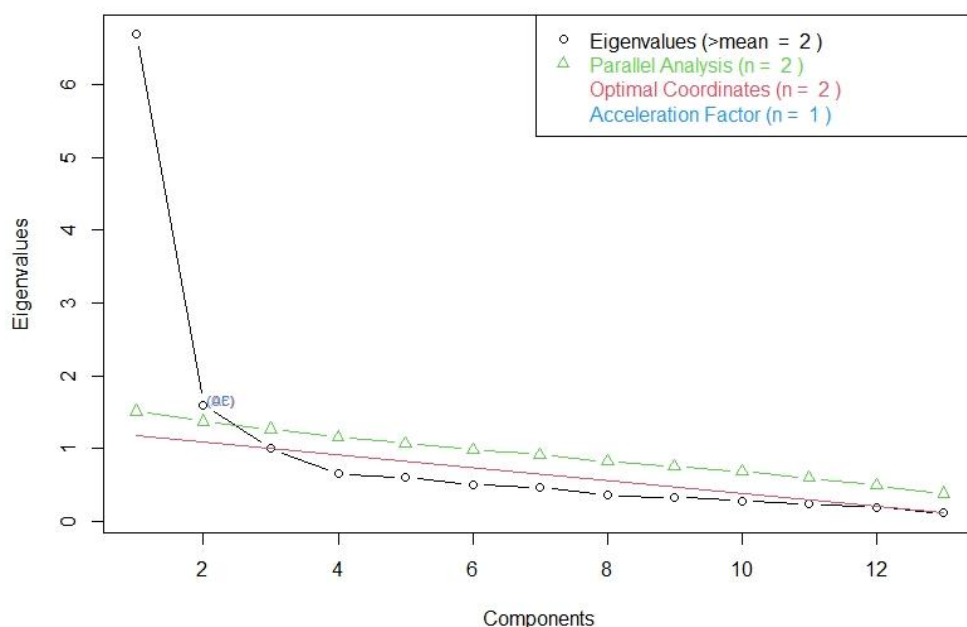


Figure 1 Scree Plot for Identity-Motivation Instrument.
Factor analysis results and this scree plot were interpreted to imply a four-factor model.

As described in Table 2, the first factor was labeled “motivation for cultural exposure”, contained four items, and these items were assigned the codes Culture1 through Culture4. The second factor was labeled “instrumental motivation”, contained four items, and these items were assigned the codes Instrument1 through Instrument4. The third factor was labeled “motivation to understand problems/politics”, and contained two items, which were assigned the codes Politics1 and Politics2. The fourth factor was labeled “Islamic motivation”, and contained two items which were assigned the codes Islamic1 and Islamic2. As one original item did not load on any factor, the final model supported 12 items placed on four subscales as described. Cronbach α analysis rendered the following results: for cultural exposure (four items) = 0.88, instrumental (four items) = 0.86, to understand problems/politics (two items) = 0.88, and Islamic (two items) = 0.79. All Cronbach α results exceeded the 0.70 threshold. Figure 2 provides a plot showing the distribution of responses to the 12 items placed on four subscales. A final version of the identity-motivation instrument is available in Appendix A.

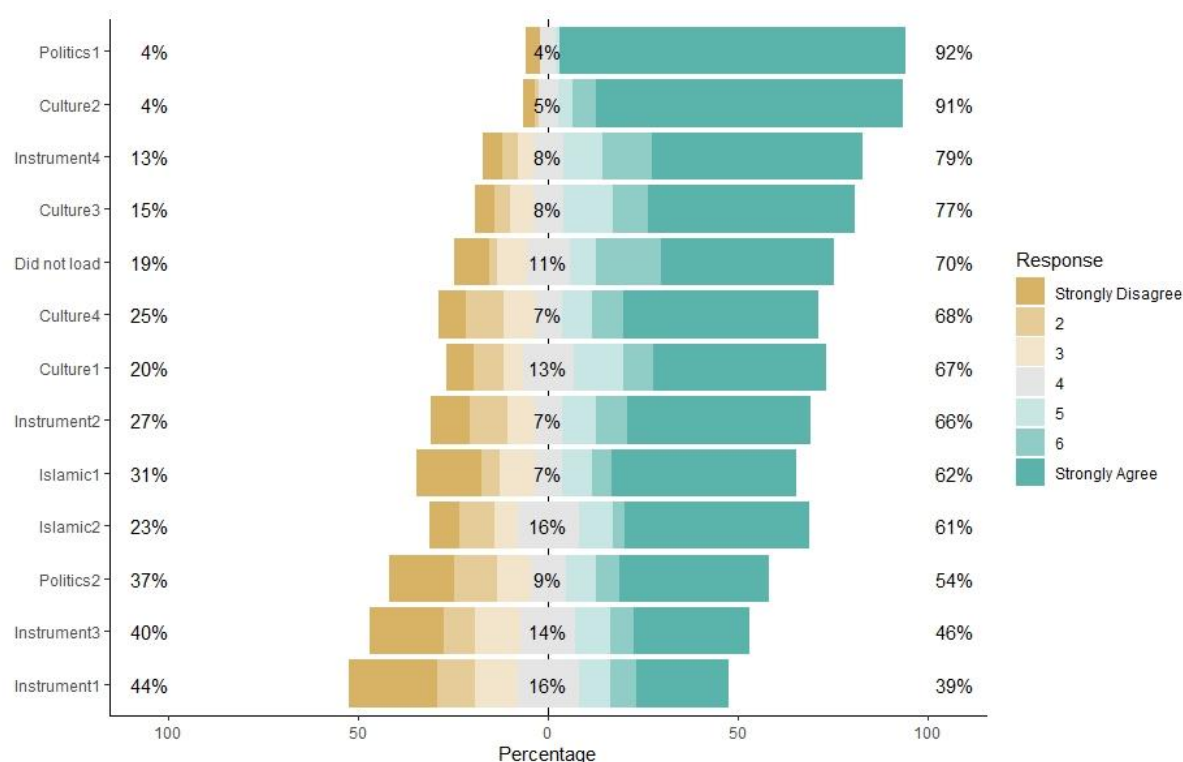


Figure 2 Likert Scale Plot for Identity-Motivation Instrument Items

This figure includes the distribution of responses for each item in the identity-motivation instrument. Each horizontal bar represents an item, and the label along the y-axis indicates the code for the item (see Table 2 to decode). The percentages listed along the left y-axis indicate the percentage of sample answering 1 through 3 (disagree), and the percentages listed along the right y-axis indicate the percentage of sample answering 5 through 7 (agree). The percentage listed along the center vertical line indicates percentage of answers of 4 (neutral). Items are ordered decreasing from largest percentage of agreement. As can be seen by the distributions, there was 70% or more agreement with the first five items.

C. Subscale Scores

Table 3 presents summary statistics for the four subscales identified from factor analysis.

TABLE 3
SUMMARY SCORES FOR ALL SUBSCALES

Subscale	All mean, sd	Site*			ANOVA p-value	Range
		KAU-ALI mean, sd	PNU-ALI mean, sd	Imam-ALI mean, sd		
For cultural exposure	22.0, 6.6	25.2, 3.8	20.8, 6.6	22.5, 7.0	0.0984***	4 to 28
Due to Islamic identity	13.1, 2.4	13.5, 1.7	13.2, 2.1	12.9, 2.9	0.7040	2 to 14
To understand politics/ problems better	8.2, 4.3	8.5, 4.4	7.2, 3.5	9.5, 5.0	0.0449**	2 to 14
For instrumental needs	19.8, 7.7	20.7, 6.8	18.4, 7.7	21.4, 7.7	0.1870	4 to 28

sd = standard deviation. * KAU-ALI: King Abdulaziz University Arabic Language Institute, PNU-ALI: Arabic Teaching Institute for Non-Arabic Speakers at Princess Nourah bint Abdulrahman University, Imam-ALI: Al-Imam Muhammad Ibn Saud Islamic University. ** Statistically significant at $\alpha = 0.05$. *** Statistically significant at $\alpha = 0.1$.

As can be seen in Table 3, subscale scores were highest on the Islamic and cultural exposure subscales, and lowest on the instrumental and problems/politics subscales. Mean summary scores only differed statistically significantly by site for the problems/politics identity-motivation subscale, where the highest mean was seen at Imam-ALI (ANOVA $p =$

0.0449), although the cultural exposure identity-motivation subscale approached statistical significance ($p = 0.0984$), with KAU-ALI registering the highest mean score.

IV. DISCUSSION

In our pilot study, through adapting a previously-researched instrument, we were able to successfully measure four different constructs behind identity motivation to learn L2 Arabic in a sample of ALI learners in KSA, as well as provide evidence of the instrument's validity and reliability. The instrument demonstrated utility in quantifying sources of motivation for learning L2 Arabic arising from Islamic, Arab, or Middle Eastern identity. It also identified other sources of motivation which were largely consistent with the literature, but presented some nuanced findings, as will be described here.

Although our analysis revealed slightly different factors than found in the original study of the instrument, we are consistent in observing that Islamic identity was prevalent in our sample and appeared to be a strong motivator (Husseinali, 2006). In the study of the original instrument, which was on L2 Arabic learners at a US university not long after the events of 9/11, among Muslim learners in the study, Islamic identity was a strong driver of L2 motivation (Husseinali, 2006). As almost all of the sample in the current study is Muslim, it is not surprising the our study was consistent with the original study in finding Islamic identity as a strong factor in our results (Husseinali, 2006). The original study included "heritage learners" (those with Arab, Muslim, or Middle Eastern identity), and "non-heritage learners" (all others), and found that heritage learners who had a strong L2 motivation for identification reasons also had strong instrumental motivation (Husseinali, 2006). Instrumental motivation was also a primary source of motivation found in two other studies of L2 Arabic learners in KSA (Abdelhalim & Alqubayshi, 2020; Al-Musnad, 2018). Instrumental motivation was identified as one of the four factors in the current study, but Islamic identity and the desire for cultural exposure were stronger sources of motivation among the ALI sample. Additionally, in previous studies, the desire for cultural exposure was found to be an important motivator in all categories of L2 Arabic learners, and this is consistent with one of the factors found in the current study (Abdelhalim & Alqubayshi, 2020; Al-Musnad, 2018; Husseinali, 2006). A factor identified in the original study that did not surface in our analysis was an orientation toward travel and world culture; we believe that this factor may have been subsumed into the desire for cultural exposure factor (Husseinali, 2006).

Also in the study of the original instrument, 81.4% of non-heritage learners were learning L2 Arabic to better understand Middle East problems/politics, while only 70% of heritage learners reported this source of motivation (Husseinali, 2006). As our sample consisted of predominantly heritage learners, our findings of a fourth factor from our analysis – to better understand Middle East problems/politics – are also consistent with these findings. Interestingly, there were statistically significant differences in mean scores between the sites, with Imam-ALI having the highest score on this factor, suggesting that ALI learners from that site are more motivated to learn L2 Arabic for this reason compared to the other sites. Because site and gender are colinear in this setting, it is difficult to speculate the rationale for this difference.

These participants were current students or alumni in the diploma program at these ALIs, which is for non-Arabic-speaking students who come to KSA to study in the higher education system. This background may explain why, when looking at summary scores, their identity-motivation constructs appeared very strong in terms of their Islamic identity, and their instrumental motivation appears not as strong. A similar effect was seen in the US study among L2 Arabic learners who expressed wanting to learn Arabic for reasons of cultural identity (Husseinali, 2005). Also, higher scores on the cultural exposure factor suggest that this cohort was similar to the one studied by Abdelhalim and Alqubayshi (2020), who found that their sample of L2 Arabic learners at Imam-ALI were motivated by wanting to understand Saudi culture and wanting to communicate with the Saudi people. This mirrors the findings from a study of US instructors and staff at an intensive English training program in the US who were learning L2 Arabic, and said they were motivated by wanting to better understand Arab culture, and communicate with Arabic speakers for the purposes of developing friendships (Bouteldjoune, 2012). In addition to the diploma program, the ALIs offer Arabic training in shorter courses aimed at the business community. It is possible that surveying this population will reveal identity-motivation that is less focused on Islamic identity and more focused on instrumental purposes. The instrumental profile found in this study mirrors what was found by Al-Musnad (2018) among female foreign nurses in KSA and by Aladdin (2010) who studied NMMLAs in Malaysia.

In the current analysis, we demonstrated that our identity-motivation instrument can measure four factors associated with motivation to learn L2 Arabic in KSA ALI learners: for cultural exposure, due to Islamic identity, to understand Arab or Middle Eastern problems/politics, and for instrumental reasons. However, these results should be validated on other similar cohorts, because our study was limited in a few ways. First, none of the participants identified as Saudi, and so we could not explore how being a Saudi who grew up in a non-Arabic-speaking part of the world would influence motivation about learning L2 Arabic. Future studies could look at identity-motivation to learn L2 Arabic from the point-of-view of other identities, such as nationalism for home country. Second, our factor analysis results for the third factor – to understand problems/politics of Arabic-speaking countries – had weaker loadings and contains only two items. We are not convinced that this factor is replicable, and if it is, that it has enough or the right items on it. This will need to be evaluated in future research on different populations of individuals learning L2 Arabic.

This study has both strengths and limitations. Its strengths lie in its focus on researching an instrument to measure identity-motivation on L2 Arabic learners specifically studying at KSA's ALIs. Because we were able to focus on this population, we were able to pilot an instrument that will likely continue to perform well in L2 Arabic learners in KSA as we seek to improve it in future studies. However, this focus also poses limitations, in that this instrument will need to be studied again in similar populations determine if factors found in this analysis continue to load similarly, and whether weaker factors can be made stronger in future versions. We also welcome the use of this instrument by other researchers on other populations learning L2 Arabic to see how well it performs outside of our current context of KSA ALIs.

In conclusion, we were able to successfully adapt an instrument to measure L2 motivation to learn Arabic arising from identity among the learners at KSA ALIs, and our analysis identified four factors behind identity-related L2 motivation. Using scores from this instrument, we were able to characterize the motivations of a sample of KSA ALI learners. More research is needed to ensure that the instrument we developed is valid and reliable in other samples of the same population, and to characterize how it performs in other populations undergoing L2 learning of Arabic.

APPENDIX. FINAL PROPOSED ARABIC L2 IDENTITY-MOTIVATION INSTRUMENT

Please rate your agreement with the following statements about why you are learning Arabic on a scale where 1 is strongly disagree, and 7 is strongly agree. I am learning Arabic

Original statement: I am learning Arabic...	1. Strongly Disagree	2	3	4	5	6	7. Strongly Agree
Because I want to be able to use Arabic with Arabic-speaking friends.							
Because I want to use Arabic when I travel to an Arab country							
Because I plan to study abroad.							
Because of my interest in Arab culture.							
Because I feel Arabic will help me better understand the Middle East politics.							
Because it will help me better understand the problems that Arabs face.							
Because of my interest in Islamic heritage.							
So I will be able to meet and converse with more and varied people							
Because I want to learn more about other cultures to understand the world better.							
Because I think it will be useful in getting me a good job.							
Because of my interest in Islam as a world religion							
So I will be able to understand and appreciate Arabic art and literature.							

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Danya A. Shaalan is currently an Assistant Professor in the Applied Linguistics Department in the College of Languages at Princess Nourah bint Abdulrahman University (PNU) in Riyadh, Saudi Arabia. She recently completed her doctoral studies in linguistics at Sussex University in the United Kingdom. Her doctoral research focused on the connection between female Saudi higher education students’ motivation and second language acquisition (SLA) and identity, and used sociolinguistic methods. Her research interests include improving SLA in Saudi women in higher education through the optimization of curriculum and improvement of teacher training and knowledge.

Badriyya B. Al-onazi is an Associate Professor of Applied Linguistics at the Institute for Teaching Arabic to Speakers of Other Languages at Princess Nourah bint Abdulrahman University. She is the Dean of the Institute for Teaching Arabic to Non-Native Speakers at PNU, and Chairman of the Consultative Committee for Deans of Institutes of Arabic Language Teaching in Saudi Universities. She is Member of the Advisory Board of the Institute for Teaching Arabic to Non-Native Speakers at the Islamic University. She contributes to the dissemination of the Arabic language through the teaching of Arabic at the Institute of Arabic Language Teaching at the university, the (Arabic) Institute, and a key member in the construction of the Diploma Program for Teaching Arabic as a Second Language. She has published many articles in scholarly journals in English and Arabic. Her research interests include cross cultural communication, corpus linguistics, and teaching Arabic as a second language.

Alya K. Alshammari is an Assistant Professor at Princess Nourah bint Abdulrahman University in the Department of Applied Linguistics, College of Languages, Saudi Arabia. She received her PhD degree in Linguistics from the University of Queensland, Australia. She has published a number of articles in scholarly journals. She is interested in studying the issues around English language teaching ELT, the dichotomy between native and non-native English-speaking teachers, EIL, English language diversity, World Englishes, intercultural communication, cultural studies and the concept of identity.