



Learning Arabic in Scandinavia: Motivation, metacognition, and autonomy

Raees Calafato

Department of Foreign Languages, University of Bergen, HF-bygget, Sydnesplassen 7 Postboks 7805, 5020 Bergen, Norway

Received 24 April 2020; received in revised form 27 July 2020; accepted 28 July 2020
Available online



Abstract

Rising levels of immigration, especially from the Middle East and North Africa, have led to significant socio-demographic changes and increasing levels of linguistic diversity in Scandinavian countries. In parallel with these developments, a growing number of students in Norway, Sweden, and Denmark have started to learn Arabic at school and university. Learning Arabic presents both challenges and opportunities. For example, it furthers the goal of states to develop multilingual citizens, yet it also tasks educational institutions with designing Arabic courses that reflect the interests and aspirations of their students and provide them with the tools to make sustained progress. In order to accomplish this, it is important to first understand what motivates students to learn Arabic and the extent to which they use self-regulatory strategies to enhance their learning. This article reports on a study that explored the self-regulation and language learning motivation of university students ($N = 96$) learning Arabic in Norway, Sweden, and Denmark. The findings revealed that the Norwegian, Swedish, and Danish participants differed statistically significantly in their motivation to learn Arabic. Statistically significant gender differences were also found with respect to the participants' self-regulation. The study provides important insights into student metacognition, autonomy, and motivation to learn non-European languages in the Scandinavian context.

© 2020 The Author(s). Published by Elsevier B.V. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

Keywords: Language learning; Multilingualism; Motivation; Learner autonomy; Metacognition; Arabic

1. Introduction

Geopolitical developments in the Middle East and North Africa (MENA) have had a profound effect on a number of countries, especially those in Europe, where hundreds of thousands of new immigrants, many of them Arabic speakers, have sought asylum, work, and a new life. Due to these developments, the ethnic and linguistic profiles of many European countries have undergone rapid super-diversification, with far-reaching consequences for the economy, the local populace, and the state of education. Perhaps in recognition of this growing super-diversity (see [Silverstein, 2015](#)) and the need to develop citizens who can effectively navigate and benefit from it, some countries have begun to promote the learning of multiple languages as an explicit goal of language education in schools and universities (see the articles in [Wright et al., 2015](#)). As a result, schools and universities are now faced with the challenge of devising and implementing language curricula that motivate and satisfy the needs of students who are increasingly exposed to diverse cultures and languages and likely desire to engage in cross-cultural interactions.

E-mail address: raees.calafato@uib.no.

Recent studies indicate that younger generations are strongly motivated to learn multiple foreign languages, with many feeling that the traditional focus on learning only English is no longer enough in today's multilingual environment (e.g. Calafato and Tang, 2019a, 2019b; Siridetkoon and Dewaele, 2018). Such studies help us understand what languages younger generations are learning, especially languages other than English (LOTes), and their motivations for learning them (for an overview, see Mendoza and Phung, 2019). For educational institutions, governments, and other stakeholders that seek to encourage people to become multilingual, obtaining research on their language learning motivation (LLM) is vital because it provides insights into how people plan to use the languages they learn. Universities can use such information to design language courses that more accurately reflect their students' wider educational and life goals, thereby creating synergies between their language courses and the broader range of degree programs they offer. Teacher education programs, too, can be improved in much the same way.

At the same time, high levels of LLM alone do not always lead to successful learning outcomes among students. They should also acquire appropriate language learning strategies and develop the ability to reflect on and organize their learning. In other words, for learning to be successful, high levels of motivation should ideally be accompanied by similarly high levels of metacognition and autonomy (Ushioda, 2014). Metacognition and autonomy become especially important when students learn languages that differ markedly from those they already know. In Scandinavian countries, the Arabic language has acquired a growing footprint due to, as already mentioned, the arrival of hundreds of thousands of migrants from the MENA region (Nielsen, 2017; Parkvall, 2018). This has led to Scandinavian citizens becoming increasingly exposed to the Arabic language and associated cultures. Several universities and schools in Norway, Sweden, and Denmark also now offer Arabic language courses and degree programs. However, despite its growing footprint, few studies until now have explored what motivates students to learn Arabic in these countries or, for that matter, elsewhere (e.g. Calafato and Tang, 2019).

The paucity of studies on students' motivation to learn Arabic in the Scandinavian context represents a gap in our knowledge that may have implications for the effectiveness of Arabic language courses offered in Norway, Sweden, and Denmark. It also forms part of a larger research gap regarding students' motivation to learn LOTes, especially non-European ones, many of which are acquiring growing prominence globally (e.g. Bao and Du, 2015; Du et al., 2017). More importantly, LLM studies have seldom investigated the ability of students to sustain their motivation via self-regulation (see Ushioda, 2014), which means we know little about the strategies that students develop to learn new languages, some so unlike their own, and the implications this has for the learning of LOTes. For governments that seek to develop multilingual citizens, understanding not only what motivates students to learn languages but also their ability to remain motivated is essential (Wright et al., 2015).

Given the rising levels of super-diversity in Europe and around the world and the influence this may exert on people's language learning preferences and motivation, this article reports on a study that explored the motivation to learn Arabic among university students in Norway, Sweden, and Denmark, their reactance (Lanvers, 2016), and their self-regulation (Ushioda, 2014). Using a cross-cultural research approach, the study furnishes researchers, policymakers, and educational institutions with insights into the factors that motivate university students in Scandinavian countries to learn Arabic and offers recommendations on how to sustain their motivation. The study's findings are particularly valuable for evaluating the overall effectiveness and appropriateness of Arabic language programs and for making targeted revisions to lesson formats and teaching methods in order to better develop students' motivation and self-regulation.

2. Motivation and self-regulation

Research on language learning has frequently explored LLM, which can be described as the sum of all the factors due to which people decide to learn a language, because it affects almost all aspects of language learning, including learner achievement (Moskovsky et al., 2016), level of engagement, and enjoyment (Cho and Castañeda, 2019). LLM is also dynamic in that it can change throughout the learning experience, with students sometimes evincing falling levels of motivation as they progress in a given language (Graham et al., 2016). This is because their initial levels of motivation may often be predicated on their *expectations* of what learning a language involves rather than on any real understanding of what learning said language actually entails (Ushioda, 2014). Should the language be particularly difficult (e.g. due to a complex writing system or morphology), it could create complex challenges that their LLM alone might not be able to overcome. In such instances, efforts to promote learning among students by merely trying to boost their motivation levels would have a limited impact since it would not furnish them with the tools to overcome all the challenges they faced. Therefore, in addition to being motivated, students should develop their ability to self-regulate their learning so that they have the wherewithal to sustain their motivation levels and make tangible progress (Ushioda, 2014).

2.1. Language learning motivation and reactance

The study of motivation has been operationalized using several theoretical frameworks, with each having some overlap (see Ushioda, 2020; Dörnyei, 2020). The L2 motivational self system (L2MSS) is one such framework (Dörnyei, 2009) and consists of three facets: the ideal self, the ought-to self, and the language learning experience. The ideal self symbolizes the kind of language user the language learner desires to become. Motivation to learn occurs as the learner strives toward this ideal *future* self. The ought-to self represents what the learner feels they *must* become in the future due to external factors and in order to avoid negative consequences. Frameworks that are more recent include the Process Motivation Model (PMM) (Bower, 2019) and Nakamura's (2019) linking of motivation to life domains and speech genres. The PMM is a combination of Coyle's (2011) conceptualization of motivation as drawing from the learning environment, learner engagement, and identity, and components from other frameworks. Nakamura (2019), meanwhile, focuses on the ideal self and argues that LLM, especially with respect to LOTE, positively correlates with the number of life domains (e.g. education, career, etc.) in which the target language will be used.

Each framework approaches motivation differently, for example, as a state, process, or trait, and focuses on various aspects like cognition, affect, and identity (Ushioda, 2020). Among these frameworks, the L2MSS continues to enjoy significant influence (Bower, 2019; Ryan and Dörnyei, 2013), with newer frameworks incorporating aspects from it (e.g. Bower, 2019; Nakamura, 2019). At the same time, studies show that the L2MSS does not always accurately predict achievement, nor are the various selves always found to be relevant (see Oakes and Howard, 2019). For instance, Moskovsky et al. (2016) discovered that the ideal self weakly and negatively correlated with achievement. Papi and Abdollahzadeh (2012) found that students' ideal self did not correlate with their motivated behavior in the classroom. Both Moskovsky et al. (2016) and Papi and Abdollahzadeh (2012) noted, however, that this lack of correlation might be due to the exam-oriented nature of English courses in Saudi Arabia and Iran.

Researchers, meanwhile, have started to integrate the concept of international posture (Yashima, 2002) into the L2MSS since both explore learners' imagined *future* selves. Studies have found a strong correlation between international posture, which represents learners' interest in international affairs, their willingness to study and work overseas, and their readiness to interact with other cultures, and LLM (e.g. Kong et al., 2018). In parallel with this, there has been a move toward exploring an additional type of language learning motivation, one that is built around a reaction to external forces, much like the ought-to self, yet is different in that it draws motivation from pushing back against such forces instead of submitting to them (see Lanvers, 2016; Thompson, 2017). Termed *reactance*, and drawing from psychology (see Brehm and Brehm, 1981), this type of motivation is often viewed as a trait rather than as an emotional response to external stimuli, with some considering it more prevalent in societies that place greater emphasis on individual freedoms (Laurin et al., 2013).

Such developments notwithstanding, there continue to be aspects of learning that most motivational frameworks, including the L2MSS, have not taken into account, but which have a direct impact on LLM and, more importantly, on learner achievement. One such aspect is learners' ability to self-regulate their learning, specifically, their levels of autonomy and metacognition, which can strongly influence their motivation to learn a language (Ushioda, 2014). For example, studies might report high levels of motivation among students to learn a particular language, yet it is difficult to gauge the sustainability of such motivation and its effects on their achievement without also considering their levels of self-regulation. Moskovsky et al. (2016, p. 643) allude to this when they say that "learners must have carefully conceived action plans in place that are designed to enable them to realize their vision".

2.2. Self-regulation

In this study, self-regulation is defined as the extent to which learners are metacognitively and behaviorally active participants in their learning (Zimmerman, 1986). It serves as an umbrella term for learner autonomy and metacognition (Cera et al., 2013; Kaplan, 2008), and has strong links to motivation (Ushioda, 2014). Learner autonomy in language acquisition research means learners' *acquired* ability, capacity, and willingness to actively and independently manage their learning, for example, by identifying their learning goals (Dickinson, 1995; Ushioda, 2014). Metacognition, on the other hand, refers to learners' systematic monitoring, planning, and evaluation of their learning (Vandergrift, 2005). As noted by Gao and Zhang (2011), learner autonomy and metacognition are interrelated concepts since learners cannot achieve autonomy without engaging in metacognitive operations. Gao and Zhang, much like Ushioda (2014), also observe that high levels of metacognitive knowledge and autonomy play a decisive role in determining learner achievement.

Studies have reported strong, positive correlations between LLM, metacognition, and learner autonomy (e.g. Spratt et al., 2002; Vandergrift, 2005). The implication is that a drop in one leads to a corresponding fall in the others. Ushioda (2014), elaborating on this interrelatedness, writes that, regardless of how desirous people are about learning a particular

language, it is unlikely that they will be able to continue to successfully progress in the language and maintain their levels of motivation by dint of emotions alone. As pointed out by [Moskovsky et al. \(2016\)](#), they might also need to think about their learning goals and come up with an action plan for the days and weeks ahead. By taking such initiatives and devising a structured approach to language learning that is independent yet complements the instruction received in the classroom, learners could furnish themselves with a plan that reinforces and sustains their motivation and develops their sense of agency, resilience, discipline, and awareness of their language abilities and needs.

2.3. Research questions

Given the limited number of studies on LLM and learner self-regulation in Scandinavian countries, especially with regard to the learning of non-European LOTEs like Arabic, this study sought to answer the following research questions:

1. What factors motivate learners in Norway, Sweden, and Denmark to learn Arabic?
 - 1.1. Are there any differences between the participants based on context?
2. To what extent do they self-regulate their learning of Arabic?

3. Methods and instruments

3.1. Participants

96 students (68 females and 27 males; one participant declined to indicate gender), enrolled in Modern Standard Arabic (MSA) courses at universities in Norway, Sweden, and Denmark, participated in the study. The participants, who were all beginner-level students, reported their first language as Norwegian, Swedish, or Danish. Another 18 native Arabic speaker students, enrolled in the same MSA courses, also participated in the study, although they were ultimately not included for two reasons. Firstly, they submitted partially completed questionnaires, and secondly, they had a different learner profile from that of the non-Arabic speaker participants. Students may sometimes choose to study their first language at university if it is an option because it is naturally easier for them. As staff from some of the Arabic departments explained, the native Arabic speaker students already knew an Arabic dialect and might have been taking Arabic courses to (1) further develop their Arabic literacy skills or (2) for easy credits. Therefore, their motivation and expectations when learning Arabic were different from those of the beginner-level non-Arabic speaker participants.

The participants had been attending their MSA courses for several weeks when the project commenced. Their knowledge of Arabic was mostly elementary, with 69 participants reporting no prior exposure to Arabic, 15 reporting that they had had some prior exposure to Arabic via online or private courses, 2 reporting familiarity with the alphabet, and 7 participants reporting that they knew someone who spoke it (e.g. friends). Because these were beginner-level courses, the focus was on building up the students' knowledge of basic Arabic morphosyntax and the writing system, laying the groundwork for developing their Arabic language abilities, and introducing them to Arabic culture and society (religion, history, etc.). More generally, the Arabic programs at the Norwegian, Swedish, and Danish universities were found to emphasize the sociocultural (insights into the MENA region) and career-related benefits of studying Arabic (e.g. [KU, 2020](#); [SU, 2020](#)), and were quite similar in how they promoted the learning of Arabic to students.

3.2. Data collection and analysis

Data from the 96 participants (40 from Denmark, 37 from Norway, and 19 from Sweden) were collected over two months via a multilingual, online questionnaire that was made available to them in Norwegian, Swedish, Danish, and English via the SurveyXact platform, an online research survey tool. A list was first drawn up of universities in Norway, Sweden, and Denmark that offer Arabic language courses from beginner-level onwards. The Arabic departments at these universities were then approached, in person or via email, and informed about the parameters and goals of the study. Their help was sought in discussing the project with students and inviting them to participate. The responses were very positive, with all universities except one expressing an interest in participating. The faculty responsible for teaching Arabic at these universities received a link to the questionnaire that they were asked to share with the students. Student participation in the project was completely voluntary, confidential, and anonymous, and no information was collected that could identify any of the participants in any way.

The questionnaire consisted of 67 6-point Likert items, 8 open-ended questions (3 on the participants' language backgrounds), and 2 items on the participants' biographical data (see Appendix A). The 67 Likert items comprised statements exploring the participants' motivation to learn Arabic, their desired level of proficiency in Arabic, their interest in Arabic-speaking regions, and their use of self-regulatory strategies. The 8 open-ended questions probed these themes

more deeply. The Likert items that explored the participants' motivation to learn Arabic were designed based on data from Dörnyei and Taguchi (2009) and Thompson and Vásquez (2015). Cotterall (1999) and Wang et al. (2009) were used as references when formulating the Likert items that assessed the participants' self-regulation. The result was the creation of a new measure that explored LLM, learner autonomy, and metacognition with respect to learners of Arabic. The questionnaire data were analyzed using SPSS and JASP.

Because the measure had never been used previously, exploratory factor analysis (EFA), using the Maximum Likelihood extraction method with oblimin rotation, was performed to explore the underlying structure of the items. The internal consistency of the questionnaire's scales was assessed using Cronbach's alpha (α), Guttman's lambda 6 (λ), and MacDonald's coefficient omega (ω). The ANOVA test, followed by the LSD post hoc test, was performed to check for statistically significant differences between the participants based on country, gender, level of multilingualism, and prior exposure to Arabic. An alpha level of .05 was used for all tests. The strength and direction of the correlations between the participants' motivation to learn Arabic and their self-regulation are reported using Pearson's correlation coefficient (r). The study reports Hedge's G (g) alongside statistically significant results using Plonsky and Oswald's (2014) criteria: .40 denotes a small effect, .70 signifies a medium effect, and 1.00 indicates a large effect. As for the open-ended questions, the participants' responses underwent thematic analysis and were coded and grouped according to recurring themes.

4. Results

4.1. Reliability and underlying structure

Table 1 lists the factor loadings following the EFA, using the eigenvalues-greater-than-1 approach and a cut-off of .30 when displaying the factor loadings, for the 32 items on Arabic learning motivation, learner autonomy, and metacognition. All 32 items loaded onto six factors, with these accounting for 62.79% of the variance. Results from Bartlett's test of sphericity [$\chi^2(496) = 1345.680, p < .001$] indicated that the data was an appropriate fit for conducting factor analysis.

The factor loadings indicated that the items clustered based on (1) the participants' job-related goals (items 1–4), (2) a more intrinsic set of reasons for learning Arabic (items 5–13), (3) a desire to work in the MENA region and understand Arabic culture, society, and Islam (items 14–16), which was labeled posture (see Yashima, 2002), (4) reactance (items 17–21), autonomous learning strategies (items 22–28), and metacognition (items 28–32).

Table 2 lists the Cronbach's alpha (α), Guttman's lambda 6 (λ), and MacDonald's omega (ω) coefficients, as well as the Pearson correlation test results, for the six factors. The reliability coefficients indicated a satisfactory level of consistency across the factors while the correlation test results revealed statistically significant, positive correlations between several factors. Metacognition, however, only statistically significantly (and positively) correlated with the autonomy factor.

4.2. The participants' level of multilingualism

Fig. 1 illustrates the participants' level of multilingualism. The data indicated that the Norwegian participants were the least multilingual overall, whereas the Swedish participants were the most multilingual among the three groups surveyed. Many participants ($n = 45$; 46.9%) knew languages from both the Germanic (e.g. English) and Romance language groups (e.g. Spanish), whereas fewer participants ($n = 18$; 18.8%) reported knowing only Germanic languages. A small number of participants possessed more complex language group combinations, for example, Germanic-Romance-Semitic (excluding Arabic) ($n = 5$; 5.2%), Germanic-Romance-Slavic ($n = 5$; 5.2%), and Germanic-Romance-Afro-Asiatic ($n = 5$; 5.2%).

ANOVA test results [$F(2, 93) = 8.761, p < .001$] revealed that there were statistically significant differences between the Norwegian ($n = 37, M = 3.35, SD = .86$), Swedish ($n = 19, M = 4.42, SD = 1.17$), and Danish participants ($n = 40, M = 4.20, SD = 1.18$) in terms of the number of languages they reported knowing. Post hoc test results indicated that the Swedish ($p = .001, g = 1.083$) and Danish participants ($p = .001, g = .810$) were statistically significantly more multilingual than the Norwegian participants; the effect size is medium to large.

4.3. Motivation and international posture

Fig. 2 shows the extent to which the participants were motivated to learn Arabic based on employment considerations. The data indicated that the Norwegian participants ($n = 36, M = 3.93, SD = 1.35$) were more motivated to learn Arabic due to employment considerations than were the Danish ($n = 40, M = 3.17, SD = 1.32$) and Swedish participants ($n = 19, M = 3.18, SD = 1.53$).

ANOVA test results [$F(2, 92) = 3.376, p = .038$], followed by post hoc tests, revealed that the Norwegian participants were statistically significantly more motivated to learn Arabic due to employment considerations than were the Danish

Table 1
Factor loadings for the items exploring motivation, learner autonomy, and metacognition.

Items	1	2	3	4	5	6
I need it to work abroad.		.667				
I need it to be competitive in the job market.		.903				
It is a job requirement.		.534				
I want to be competitive in the job market.		.797				
I need it for when I travel.	.487					
I need it to understand global developments.	.441					.366
I want to teach it in the future.	.442		.412			
I want to use it when I travel.	.533	.349				
I want to read in Arabic.	.453					
I want to make friends with Arabic speakers.	.748					
I want to watch media in Arabic.	.723					
I want to listen to music in Arabic.	.799					
I want to speak it with my friends.	.783		.346			
I want to work in the Middle East or North Africa.	.406					.695
I want to understand Arabic culture and society.						.770
I want to understand Islam.	.324	.356				.547
People tell me it is very difficult to learn.				.546		
I find it challenging.				.644		
I think it is so different from my mother tongue.				.822		
Few people can learn it well.				.752		
It's not a popular language to learn.				.626		
I initiate activities on my own (listening, reading books, practicing) outside of lessons.			.577			
I look up words not taught in the lesson.			.590			
I look up synonyms of the words taught in the lesson.			.545			
I learn grammar not taught in the lesson.			.766			
I use the content I learn outside of class.			.436			.395
I research the history of the language			.506			
I search for different techniques/methods that might help me learn better.			.347		.494	
I organize a schedule outside of class devoted to language study.					.693	
I set clear time-specific achievement goals for myself.					.792	
I regularly test my knowledge of the language.					.651	
I keep a log of what I have and have not learned.					.518	

Table 2
Reliability coefficients and correlation test results for the six factors.

Factor	<i>n</i>	α	λ	ω	1	2	3	4	5	6
1. Job	4	.824	.810	.835	–					
2. Intrinsic	9	.873	.897	.875	.421**	–				
3. Posture	3	.678	.620	.721	.454**	.508**	–			
4. Reactance	5	.816	.808	.820	.257*	.218*	.083	–		
5. Autonomy	6	.780	.791	.784	.188	.381**	.344**	.172	–	
6. Metacognition	5	.777	.751	.782	.030	.041	.141	.067	.356**	–

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

participants ($p = .019$, $g = .564$); the effect size is somewhat small. The post hoc test results also indicated that the difference in motivation levels between the Norwegian and Swedish participants was almost statistically significant ($p = .056$). No statistically significant differences were found based on gender or the participants' level of multilingualism.

Table 3 contains the descriptives for the participants' intrinsic motivation to learn Arabic. The data indicated that the chance to teach Arabic or speak it with friends were not strong motivating factors for the participants, whereas they were most motivated to learn Arabic in order to understand global developments, travel, read in Arabic, and, to a lesser extent, watch media in Arabic.

ANOVA test results revealed that there were statistically significant differences between the participants in two out of the nine items (see Table 3). Post hoc test results indicated that the Danish participants were statistically significantly more motivated to learn Arabic in order to teach it than were the Norwegian ($p = .002$, $g = .770$) and Swedish participants

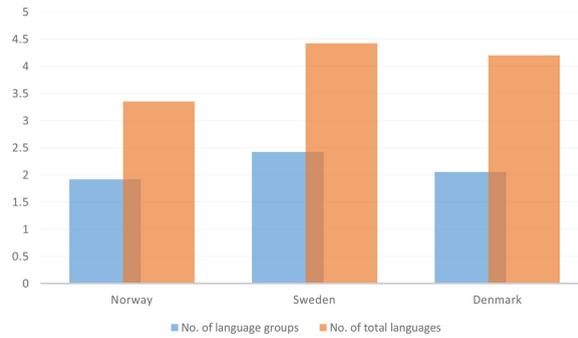


Fig. 1. The participants' level of multilingualism.

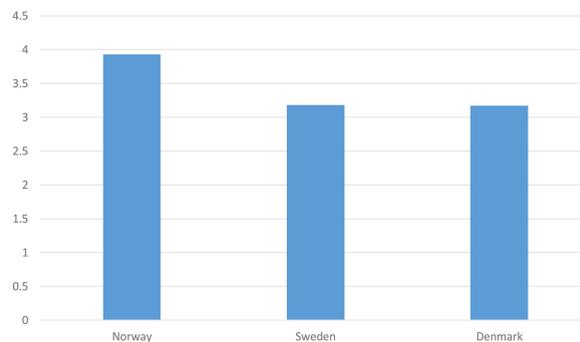


Fig. 2. The participants' motivation to learn Arabic due to employment considerations.

($p = .012$, $g = .693$) (although the motivation to teach Arabic was generally low for each group). Post hoc procedures also indicated that the Norwegian participants were statistically significantly more motivated to learn Arabic due to an interest in Arabic music than were the Danish participants ($p = .010$, $g = .624$). The effect size is almost medium. No statistically significant differences were found based on gender or the participants' level of multilingualism.

Fig. 3 shows the participants' levels of reactance per country. The data indicated that the participants, on average, exhibited low levels of reactance, although the Norwegian participants ($n = 33$, $M = 3.48$, $SD = 1.13$) possessed a higher level of reactance than did the Swedish ($n = 16$, $M = 3.03$, $SD = 1.08$) and Danish participants ($n = 38$, $M = 2.73$, $SD = 1.12$).

ANOVA test results revealed statistically significant differences between the participants in terms of their levels of reactance [$F(2, 84) = 4.049$, $p = .021$]. Post hoc test results indicated that the Norwegian participants exhibited statistically significantly more reactance than did the Danish participants ($p = .006$, $g = .660$); the effect size is almost medium. No statistically significant differences based on any other variable were found.

Fig. 4 illustrates the level of the participants' international posture per country. The data indicated that the Norwegian participants ($n = 36$, $M = 4.73$, $SD = 1.10$) had a stronger international posture vis-à-vis their motivation to learn Arabic than did the Danish ($n = 38$, $M = 4.55$, $SD = 1.09$) and Swedish participants ($n = 18$, $M = 3.71$, $SD = 1.18$).

ANOVA test results revealed that there were statistically significant differences between the participants [$F(2, 89) = 5.268$, $p = .007$]. Post hoc procedures indicated that the Norwegian ($p = .002$, $g = .892$) and Danish participants ($p = .010$, $g = .740$) had a statistically significantly more pronounced international posture than did the Swedish participants; the effect size is medium. No statistically significant differences based on any other variable were found.

The participants were also asked to describe, in their own words, any additional motivations they had for learning Arabic. 37 participants said that they had nothing to add while 59 participants elaborated on their responses to the Likert items. Fig. 5 provides a thematic breakdown of their responses based on frequency (%). Some responses touched on more than one theme.

As seen in Fig. 5, the participants were strongly motivated by a desire to understand Arabic history, culture, and Islam and interact with Arabic speakers, as well as due to a personal interest in learning Arabic (e.g., they found the language beautiful, were just curious, etc.). For instance, one participant from Sweden wrote:

It's a nice tool to have and broadens understanding of other cultures.

Table 3
The participants' intrinsic motivation for learning Arabic.

	Country	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
I need it for when I travel.	Sweden	16	2.94	1.77	2.768	.068
	Norway	33	3.73	1.59		
	Denmark	39	4.08	1.61		
I need it to understand global developments.	Sweden	19	3.95	1.72	.473	.624
	Norway	34	4.41	1.48		
	Denmark	37	4.30	1.84		
I want to teach it in the future.	Sweden	17	2.47	1.74	6.110	.003
	Norway	35	2.46	1.40		
	Denmark	36	3.67	1.69		
I want to use it when I travel.	Sweden	18	4.06	1.51	2.078	.131
	Norway	35	4.89	1.37		
	Denmark	37	4.41	1.55		
I want to read in Arabic.	Sweden	19	4.89	1.29	.443	.644
	Norway	35	4.89	1.11		
	Denmark	37	4.62	1.53		
I want to make friends with Arabic speakers.	Sweden	16	3.88	1.63	1.181	.312
	Norway	34	4.18	1.42		
	Denmark	37	3.57	1.88		
I want to watch media in Arabic.	Sweden	17	4.06	1.14	.993	.375
	Norway	35	4.37	1.31		
	Denmark	37	3.86	1.84		
I want to listen to music in Arabic.	Sweden	15	3.80	1.70	3.600	.032
	Norway	35	4.06	1.43		
	Denmark	36	3.06	1.72		
I want to speak it with my friends.	Sweden	16	3.31	1.89	.830	.440
	Norway	35	3.83	1.77		
	Denmark	37	3.32	1.81		

Note: 1 – Strongly disagree; 6 – Strongly agree.

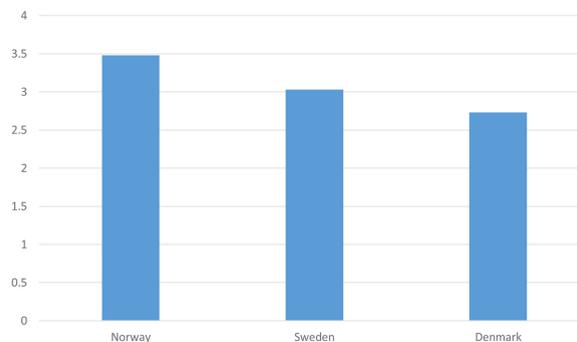


Fig. 3. The participants' levels of reactance.

Others spoke about integration (sociopolitical reason) and the need to understand the large number of Arabic speakers that had arrived in Scandinavian countries (interact with Arabs). As one participant from Denmark explained:

Det kan give større forståelse for en stor del af mine medborgere, som taler arabisk. Hjælpe med intergration! (Trans: It can promote greater understanding with the large number of citizens who speak Arabic. Helps with integration!)

Some participants expressed a general love of languages (linguaphiles). This was perfectly captured by a participant from Sweden, who stated:

Jag älskar språk! Det borde ha varit ett alternativ. Min främsta motivation är språket självt, det är mycket vackert och intressant. Allt vad yrken och relationer gäller är helt sekundärt. (Trans: I love languages! That should have been

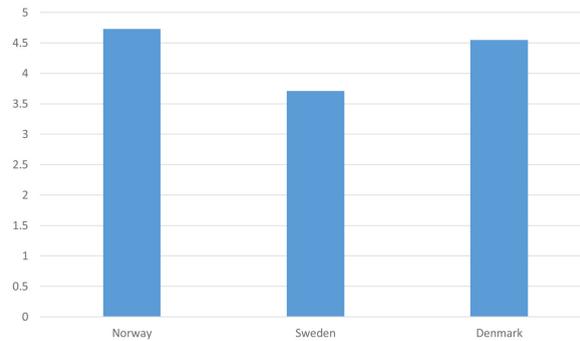


Fig. 4. The participants' international posture.

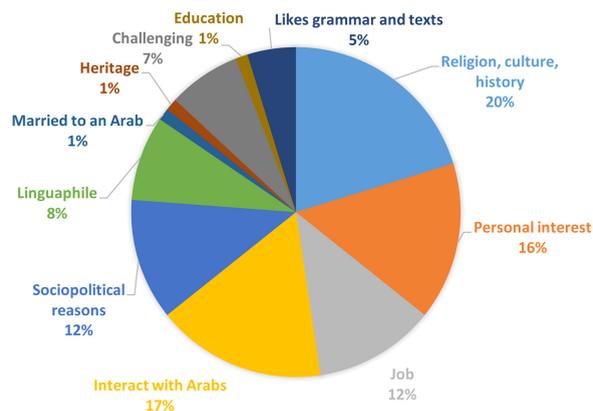


Fig. 5. Additional reasons given by the participants for learning Arabic.

an option. My main motivation is the language itself, it is very beautiful and interesting. Anything to do with work and relationships is completely secondary.)

Participants linked their job-related motivations for learning Arabic to working in the MENA region or in environments frequented by large numbers of Arabic speakers. One Norwegian participant wrote:

Vil jobbe med leger uten grenser, vil fokusere på konfliktområder (og andre eg er mest personlig interessert i)
(Trans: I want to work with Doctors Without Borders and focus on conflict areas (and it is something I am also personally interested in).)

5 participants revealed that they were learning Arabic because it was challenging, out of the ordinary, and might help them learn other languages in the future. Listed below are some of their responses (the first two are from Swedish participants and the third one is from a Norwegian participant):

För att jag tycker om att utmana min förmåga. (Trans: Because I like to challenge myself (my abilities).)
Absolut viktigaste skälet är att utmana mig själv. Kan jag lära mig (på basnivå) ett nytt och helt annorlunda språk vid min ålder? (Trans: The most important reason is to challenge myself. Can I learn (at a basic level) a new and completely different language at my age?)
Det er spennende å trene hjernen. Jeg vil lære det å lære meg et nytt skriftspråk, slik at det også blir lettere å lære flere språk senere. (Trans: It is exciting to train one's mind. I want to learn a new written language so that it becomes easier to learn more languages later on.)

Only one participant each cited heritage, educational concerns, or being married to an Arabic-speaker as reasons for learning Arabic.

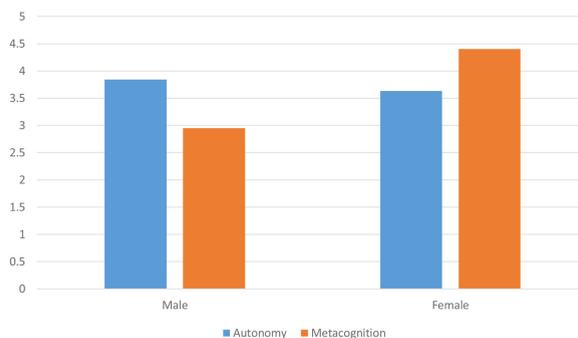


Fig. 6. The participants' levels of autonomy and metacognition based on gender.

4.4. Learner autonomy and metacognition

Fig. 6 illustrates the participants' levels of autonomy and metacognition based on gender. The data indicated that while both the male ($n = 24$, $M = 3.84$, $SD = .95$) and female participants ($n = 61$, $M = 3.63$, $SD = .96$) had similar levels of autonomy, the female participants ($n = 61$, $M = 3.68$, $SD = 1.03$) had a higher level of metacognition than did the male participants ($n = 23$, $M = 2.96$, $SD = .88$).

ANOVA test results [$F(1, 82) = 8.943$, $p = .004$, $g = .720$] indicated that the female participants possessed a statistically significantly higher level of metacognition than did the male participants; the effect size is medium. No other variables, including context, produced statistically significant results.

5. Discussion

Before discussing the findings, it is important to provide some context regarding the number of participants in the study. Based on feedback from some of the Arabic staff at the participating universities, it can be said that the study's sample size represented close to half of all actively attending beginner-level non-Arabic speaker students learning Arabic at universities in Norway, Sweden, and Denmark (see also the enrollment data reported in Nielsen, 2017). It is also worth noting that there were far more female participants in the study than there were males, which might hold implications for those findings where statistically significant differences were found between the two genders (i.e. metacognition). At the same time, this study is one of the first to explore LLM, learner autonomy, and metacognition with respect to the learning of non-European LOTE in Scandinavian countries.

As such, the findings indicate that there are statistically significant and meaningful country- and gender-specific differences between the participants regarding their LLM and self-regulation. The Norwegian participants, for example, were more strongly motivated to learn Arabic due to job-related factors than were their Danish and Swedish counterparts, with the differences being statistically significant and somewhat meaningful vis-à-vis the Danish participants. The Norwegian participants' international posture (see Yashima, 2002) was statistically significantly stronger than that of the Swedish participants and they evinced a higher level of reactance overall, statistically significantly more so than did the Danish participants. Put another way, the Norwegian participants were more strongly motivated by a desire to interact, professionally and socially, with Arabic speakers *in Arabic*, both at home and abroad. This can also be seen in their desire to make friends with Arabic speakers and speak Arabic with their friends (see Table 3), where they indicated stronger agreement with each statement than did the Danish and Swedish participants.

At present, given the limited number of studies on motivation to learn non-European LOTE in Norway, Sweden, and Denmark, it is difficult to say why these differences exist, especially since all three countries have much in common, linguistically, culturally, and historically. The Arabic course offerings at universities in the three countries, especially the beginner-level courses, are also quite similar in terms of their teaching objectives (see KU, 2020; SU, 2020). Therefore, it is unlikely that the course format significantly influenced the participants' motivation to learn Arabic, especially their levels of reactance. It is possible that the differences are due to the position the Arabic language occupies in the linguistic market (see Bourdieu, 1990) in Norway, Sweden, and Denmark. It might represent symbolic capital of a higher or lower value depending on the country. In the Swedish context, for instance, Oakes (2001) found a negative correlation between ideas of Swedish identity and perceptions of Arabic as a beautiful language among secondary school students. Perhaps this contributed to the Swedish participants' weaker international posture regarding their motivation to learn Arabic (see Fig. 4).

The findings also revealed that reactance constituted a distinct factor in this study (see [Table 1](#)), and it statistically significantly, albeit weakly, correlated with the job-related and intrinsic motivation constructs. Interestingly, reactance did not appear to correlate with international posture, learner autonomy, or metacognition. Its presence was also confirmed in the responses the participants provided to the open-ended question on their reasons for studying Arabic. The fact that participants specifically thought of Arabic as a challenge and a way to test their abilities indicates that reactance was a strong motivator for some. It would be interesting to explore reactance more deeply in terms of its ability to sustain motivation and the cultural or societal factors that lead to higher or lower levels of reactance in a group (see [Laurin et al., 2013](#); [Thompson, 2017](#)), especially in countries with similar cultures and a shared history (e.g. Norway, Sweden, and Denmark).

Moreover, the findings indicated that the participants did not appear to have distinct motivational selves as theorized by the L2MSS ([Dörnyei, 2009](#)), either ideal or ought-to, and a more logical interpretation of the underlying factors (see [Table 1](#)) would be a domain-specific conceptualization of motivation without the inclusion of selves ([Nakamura, 2019](#)). Such a conceptualization fits in well with the participants' international posture and job-related motivation to learn Arabic. Their intrinsic motivation, likewise, consists of diverse reasons that would be better suited to a domain-based approach. The participants, for example, expressed a strong desire to read in Arabic and wanted to use it for travel and to understand global developments. These themes were similarly present in their responses to the open-ended question on their reasons for learning Arabic, where several participants expressed an interest in understanding MENA developments and Arabic culture. They also tie in with the participants' desire to travel to the MENA region to work. As for reading in Arabic, specifically, this may be connected to the participants' desire to understand global developments, as well as to access authentic materials in Arabic to better understand Arabic culture and society, and interact with Arabic speakers on relevant issues.

Finally, the findings concerning the participants' levels of metacognition and learner autonomy indicated that they might require additional support in developing these further. Arabic departments could make the promotion of metacognitive strategies and autonomous learning among students an explicit aim of their courses so that students are provided with a range of tools that they can use to better regulate their learning. This would help to sustain their motivation and ensure that they stay the course as the level of difficulty increases ([Ushioda, 2014](#)). Concerning metacognition, specifically, there were statistically significant gender differences, although, as already mentioned, there were almost three times as many female participants as there were male participants. Despite this disparity, the findings support those from other studies on language learning in Norway and elsewhere (e.g. [Sheorey and Mokhtari, 2001](#)), where the female participants were found to use metacognitive strategies to a greater degree than did the male participants. Indeed, the gender differences were statistically significant only in the case of metacognition and there were no differences between the genders in any other instance.

6. Conclusion and implications

The changing geopolitical and socioeconomic global landscape has prompted many states to focus on promoting the learning of multiple languages among their citizens. In this respect, the learning of non-European LOTEs will likely continue to acquire greater importance as the world shifts to a multipolar world order where proficiency in English alone will no longer be enough to secure one's future. For states and policymakers, the study's findings represent an opportunity to more deeply explore the possible effects of linguistic markets, including the influence of political and press discourse, on the language learning preferences of their citizens, and assess the effectiveness of LOTE programs in meeting the needs of a new generation of multilingual citizens. For universities, this means the development of Arabic language programs (and even programs for other non-European LOTEs) that can better nourish students' international posture and desire to interact with Arabic speakers (and speakers of other non-European LOTEs). Lastly, and most importantly, in order to ensure that students' motivation to learn LOTEs does not diminish in the long run, it is vital to further develop their metacognition and autonomy, either by including these as an explicit component in language programs or by creating specifically tailored courses for this purpose. Absent such efforts, it is likely that Arabic departments (and those for other LOTEs) will witness a sharp drop-out rate as students transition to more advanced-level language courses.

Conflict of interest

There are no conflicts of interest to declare.

Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at [doi:10.1016/j.lingua.2020.102943](https://doi.org/10.1016/j.lingua.2020.102943).

References

- Bao, R., Du, X., 2015. Implementation of task-based language teaching in Chinese as a foreign language: benefits and challenges. *Lang. Cult. Curricul.* 28 (3), 291–310.
- Bourdieu, P., 1990. Was heißt sprechen? Zur Ökonomie des sprachlichen Tausches. Braumüller, Wien.
- Bower, K., 2019. Explaining motivation in language learning: a framework for evaluation and research. *Lang. Learn. J.* 47 (5), 558–574.
- Brehm, J.W., Brehm, S.S., 1981. *Psychological Reactance*. Wiley, New York.
- Calafato, R., Tang, F., 2019a. The status of Arabic, superdiversity, and language learning motivation among non-Arab expats in the Gulf. *Lingua* 219, 24–38. <http://dx.doi.org/10.1016/j.lingua.2018.11.003>
- Calafato, R., Tang, F., 2019b. Multilingualism and gender in the UAE: A look at the motivational selves of Emirati teenagers. *System* 84, 133–144. <http://dx.doi.org/10.1016/j.system.2019.06.006>
- Cera, R., Mancini, M., Antonietti, A., 2013. Relationships between metacognition, self-efficacy and self-regulation in learning. *J. Educ. Cult. Psychol. Stud.* 4 (7), 115–141.
- Cho, M.H., Castañeda, D.A., 2019. Motivational and affective engagement in learning Spanish with a mobile application. *System* 81, 90–99.
- Cotterall, S., 1999. Key variables in language learning: what do learners believe about them? *System* 27 (4), 493–513.
- Coyle, D., 2011. In: ITALIC Research Report Investigating Student Gains: Content and Language Integrated Learning. University of Aberdeen, Aberdeen.
- Dickinson, L., 1995. Autonomy and motivation a literature review. *System* 23 (2), 165–174.
- Dörnyei, Z., 2009. The L2 motivational self system. In: Dörnyei, Z., Ushioda, E. (Eds.), *Motivation, Language Identity and the L2 Self*. Multilingual Matters, Bristol, pp. 9–42.
- Dörnyei, Z., 2020. *Innovations and Challenges in Language Learning Motivation*. Routledge, London.
- Dörnyei, Z., Taguchi, T., 2009. *Questionnaires in Second Language Research: Construction, Administration, and Processing*, 2nd ed. Routledge, New York.
- Du, X., Zhao, K., Ruan, Y., Wang, L., Duan, X., 2017. Beginner CFL learners' perceptions of language difficulty in a task-based teaching and learning (TBTL) environment in Denmark. *System* 69, 108–120.
- Gao, X., Zhang, L.J., 2011. Joining forces for synergy: agency and metacognition as interrelated theoretical perspectives on learner autonomy. In: Murray, G., Gao, X., Lamb, T. (Eds.), *Identity, Motivation and Autonomy in Language Learning*. Multilingual Matters, Toronto, pp. 25–41.
- Graham, S., Courtney, L., Tonkyn, A., Marinis, T., 2016. Motivational trajectories for early language learning across the primary–secondary school transition. *Br. Educ. Res. J.* 42 (4), 682–702.
- Kaplan, A., 2008. Clarifying metacognition, self-regulation, and self-regulated learning: what's the purpose? *Educ. Psychol. Rev.* 4 (20), 477–484.
- Kong, J.H., Han, J.E., Kim, S., Park, H., Kim, Y.S., Park, H., 2018. L2 motivational self system, international posture and competitiveness of Korean CTL and LCTL college learners: a structural equation modeling approach. *System* 72, 178–189.
- KU, 2020. Arabic Studies. Retrieved from University of Copenhagen: <https://ccrs.ku.dk/education/arabic/>
- Lanvers, U., 2016. Lots of selves, some rebellious: developing the self discrepancy model for language learners. *System* 60, 79–92.
- Laurin, K., Kay, A.C., Proudfoot, D., Fitzsimons, G.J., 2013. Response to restrictive policies: reconciling system justification and psychological reactance. *Organ. Behav. Hum. Decis. Process.* 122 (2), 152–162.
- Mendoza, A., Phung, H., 2019. Motivation to learn languages other than English: a critical research synthesis. *Foreign Lang. Ann.* 52 (1), 121–140.
- Moskovsky, C., Assulaïmani, T., Racheva, S., Harkins, J., 2016. The L2 motivational self system and L2 achievement: a study of Saudi EFL learners. *Mod. Lang. J.* 100 (3), 641–654.
- Nakamura, T., 2019. Understanding motivation for learning languages other than English: life domains of L2 self. *System* 82, 111–121.
- Nielsen, H.L., 2017. “Arabic-as-Resource” or “Arabic-as-Problem”? Arab heritage language learners in Danish postsecondary education. In: Kagan, O.E., Carreira, M.M., Chik, C.H. (Eds.), *The Routledge Handbook of Heritage Language Education: From Innovation to Program Building*. Routledge, New York, pp. 363–378.
- Oakes, L., 2001. *Language and National Identity: Comparing France and Sweden*. John Benjamins, Amsterdam.
- Oakes, L., Howard, M., 2019. Learning French as a foreign language in a globalised world: an empirical critique of the L2 Motivational Self System. *Int. J. Bilingual Educ. Bilingualism* 1–17.
- Papi, M., Abdollahzadeh, E., 2012. Teacher motivational practice, student motivation, and possible L2 selves: an examination in the Iranian EFL context. *Lang. Learn.* 62 (2), 571–594.
- Parkvall, M., 2018. Arabiska Sveriges näst största modersmål [Arabic is Sweden's second largest mother tongue]. *Svenska Dagbladet*. Stockholm, Sweden.
- Plonsky, L., Oswald, F.L., 2014. How big is “Big”? Interpreting effect sizes in L2 research. *Lang. Learn.* 64 (4), 878–912.
- Ryan, S., Dörnyei, Z., 2013. The long-term evolution of language motivation and the L2 self. In: Berndt, A. (Ed.), *Fremdsprachen in der Perspektive Lebenslangen Lernens*. Peter Lang, Frankfurt, pp. 89–100.
- Sheorey, R., Mokhtari, K., 2001. Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System* 29 (4), 431–449.
- Silverstein, M., 2015. How language communities intersect: is “superdiversity” an incremental or transformative condition? *Lang. Commun.* 44, 7–18.
- Siridetkoon, P., Dewaele, J.M., 2018. Ideal self and ought-to self of simultaneous learners of multiple foreign languages. *Int. J. Multilingualism* 15 (4), 313–328.
- Spratt, M., Humphreys, G., Chan, V., 2002. Autonomy and motivation: which comes first? *Lang. Teach. Res.* 6 (3), 245–266.
- SU, 2020. Arabic. Retrieved from Stockholm University: <https://www.su.se/english/education/all-subjects/arabic-1.426257>.
- Thompson, A.S., 2017. Don't tell me what to do! The anti-ought-to self and language learning motivation. *System* 67, 38–49.
- Thompson, A.S., Vásquez, C., 2015. Exploring motivational profiles through language learning narratives. *Mod. Lang. J.* 99 (1), 158–174.
- Ushioda, E., 2014. Motivation, autonomy and metacognition. In: Lasagabaster, D., Doiz, A., Sierra, J.M. (Eds.), *Motivation and Foreign Language Learning: From Theory to Practice*. John Benjamins, Amsterdam, pp. 31–49.

- Ushioda, E., 2020. Researching L2 motivation: re-evaluating the role of qualitative inquiry, or the 'wine and conversation' approach. In: Al-Hoorie, A.H., MacIntyre, P. (Eds.), *Contemporary Language Motivation Theory: 60 Years Since Gardner and Lambert*. Multilingual Matters, Bristol, UK, pp. 194–211.
- Vandergrift, L., 2005. Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Appl. Linguist.* 26 (1), 70–89.
- Wang, J., Spencer, K., Xing, M., 2009. Metacognitive beliefs and strategies in learning Chinese as a foreign language. *System* 37 (1), 46–56.
- Wright, W.E., Boun, S., García, O. (Eds.), 2015. *The Handbook of Bilingual and Multilingual Education*. Wiley Blackwell, Oxford.
- Yashima, T., 2002. Willingness to communicate in a second language: the Japanese EFL context. *Mod. Lang. J.* 86 (1), 54–66.
- Zimmerman, B.J., 1986. Development of self regulated learning. *Contemp. Educ. Psychol.* 16, 307–313.