



## Factors affecting English proficiency of Arabic student nurses: Future directions for educational developers in Saudi Arabia



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### ABSTRACT

This study aims to determine the contributory factors affecting the English Proficiency of Arabic student nurses. This research employed the quantitative-cross-sectional approach conducted at the University of Hail, College of Nursing. Two hundred seventy-six student nurses participated in the study resulting from the convenience sampling. Frequency and percentage, t-test, and one-way Analysis of Variance (ANOVA) analyzed the data. Data was gathered between January and February 2022. The students have a low level of English proficiency (22.25/55). The gender has significant difference with level of English proficiency ( $t=3.679$ ;  $p<.000$ ), however, there was no significant difference with environment ( $t=.129$ ;  $p>.898$ ), peer ( $t=.255$ ;  $p>.799$ ), teacher ( $t=.515$ ;  $p>.607$ ), and technology ( $t=1.306$ ;  $p>.193$ ). Moreover, age was found no significant difference with the level of English proficiency ( $F=.618$ ;  $p>.540$ ), environment ( $F=1.415$ ;  $p>.071$ ), and teacher ( $F=2.462$ ;  $.087$ ) but with a significant difference with technology ( $F=4.155$ ;  $p>.017$ ) and peer ( $F=1.486$ ;  $p<.044$ ). The year level of the participants, was found no significant difference with English proficiency ( $F=.932$ ;  $p>.395$ ), environment ( $F=.494$ ;  $p>.611$ ), peer ( $F=1.385$ ;  $p>.252$ ), teacher ( $F=1.627$ ;  $p>.198$ ), and technology ( $F=2.23$ ;  $p>.109$ ). Lastly, the environment ( $F=(4,271=9.856, p<.000)$ ), peer ( $F=(4,271=9.856, p<.020)$ ), teacher ( $F=(4,271=9.856, p<.014)$ ) were significant contributors to the level of proficiency of the student nurses but not on technology. The student nurses have a low level of English proficiency, and gender was found to have a significant difference in English proficiency. The age was found to have no significant difference with English proficiency, environment, and teacher. However, technology and peer were found to have a significant difference. The year level of the participants was found to have no significant difference with English proficiency, environment, peer, teacher, and technology. The environment, peers, and teacher contributed to English proficiency but not to technology.

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### 1. Introduction

Students must display a good level of academic standing in order to complete their commitments in the nursing program and function at the expected level in clinical jobs (Boughton et al., 2010; Jeong et al., 2011). Communication as a foundational element of healthy relationships and collaboration must be considered a critical part of professional practice. The need for student nurses to communicate

effectively with their patients appropriately, timely, safe, and effective treatment to meet their patients' needs can influence patient outcomes. However, students in the healthcare field confront several obstacles when utilizing English, including comprehending instructions (Poon, 2013). Indeed, teachers frequently employ the original language to promote interaction. As a result, students devise techniques to compensate for insufficient classroom instruction, such as putting in extra effort outside of class and depending on peer assistance and translated materials (Yang et al., 2019). Hence, it is essential to determine students' performance in English speaking to help them improve their ability to communicate and handle information.

Literature in language research in nursing education focuses on the students' analysis and level of English proficiency. Indeed, language in the

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healthcare curriculum has garnered much attention (Alfakhry et al., 2020) as excellent communication is required to deliver safe nursing care, create therapeutic relationships with clients, and effective collaboration (Garone and Van de Craen, 2017). However, the learners' English challenges negatively impact academic achievement (Berman and Cheng, 2001), communication, segregation, and unproductive group work (Trice, 2003). Further, the lack of English proficiency can hamper the development of students' communication, presentation, and information-handling abilities (McLean et al., 2013). Showail (2020) found that the English language course given in the foundation year program prior to entering the nursing college was insufficient in preparing nursing students to satisfy their academic and professional needs.

Moreover, because of the lack of English proficiency, medical students do not fully comprehend the information contained in English textbooks (Jameel et al., 2019). This is because learners gain their early education in Arabic, resulting in difficulty in understanding distinct teaching and learning environment in which all materials and lectures must be understood in English (Jameel et al., 2019). Although difficulties with English and related impacts on students' academic and social context of students were well established, however, there is lacking literature on the contributing factors to English proficiency.

It is common knowledge in Saudi Arabia that the goal of teaching English, according to Saudi Arabia's educational policy, is to equip students with knowledge of at least one international language, and English is the only one available to acquire and teach as an official foreign language in the Saudi educational system (Alhmadi, 2014). Therefore, Kondo (2018) studied factors that contribute to students' speaking performance. This includes environment, peers, teacher, and technology. The role of these contributing elements in the use of the English language has been demonstrated by previous researchers. Wael et al. (2018), for example, stated that environmental and family background plays a significant role in the EFL learning process, particularly in how EFL learners perform orally; Tuan and Mai (2015) discovered that teacher feedback during speaking activities influences students' speaking performance. One of the essential functions of the peer group, on the other hand, is to serve as a source of information and comparison about the world outside of the family (Santrock, 2002). Finally, according to Kondo (2018), the use of technology in education aids in the development of students' English communication skills and knowledge, hence improving their English speaking performance.

Significantly, this interrogation is of paramount importance as it explores the level of English proficiency and factors that can contribute to the success of students being proficient in English. Indeed, it is believed that studying in English provides greater access to medical information and

more job chances (Alrajhi et al., 2019). However, students' performance in English speaking is influenced by a variety of factors. Therefore, it is critical to understand such factors so that learners and teachers can plan a strategy to improve the student's communication abilities. Therefore, this study aimed to determine the contributory factors affecting the English Proficiency of Arabic student nurses. The result of this study can help policymakers and academicians direct their policies in the context of the identified factors.

## 2. Materials and methods

### 2.1. Research design

This research employed the quantitative-cross-sectional approach to determine the contributory factors affecting the English proficiency of Arabic student nurses.

### 2.2. Setting/sampling

The study took place at the University of Hail, College of Nursing with 276 student nurses as the participants. Since the samples are fewer, the researchers employed convenience sampling with the following consideration; (a) students who are 18 years old and above, (b) understood basic English, and; (c) willingness to participate.

### 2.3. Data collection

Data collection has started with the approval of the school authorities and a clearance from the university's institutional review board. Prior to actual data gathering, students were invited to attend the orientation, where the purpose of the study, benefits, and their rights as participants were all discussed. Students were given the time for clarification during the orientation. Afterward, they were given at least a week to decide whether to join or not. Finally, all students who signed the informed consent were given a questionnaire. The data collection was conducted between January and February 2022.

### 2.4. Instrument

There are two instruments used in this study. The first is the English Language Usage Scale (ELUS), which is an 11-item self-report tool, expanded from the 5-item English Language Acculturation Scale (ELAS), which has been previously validated both among culturally diverse (Salamonson et al., 2013) and non-culturally diverse nursing students (Poudel et al., 2018). In this self-report scale, the response format is attuned on a 5-point Likert scale (1=Only non-English language(s); 2=More non-English than English; 3=Both non-English and English equally; 4=More English than non-English; and 5=Only English). Possible scores range from 5 to 55. The

higher the score, the better proficiency. The second is the contributing factors adapted from [Kondo \(2018\)](#) with the following subscale (1) environment with a 5-item statement, (2) peer with a 4-item statement, (3) teacher with a 6-item statement, and (4) technology with a 4-item statement. These factors can be answered with a 5-Likert scale ranging from (1) strongly disagree to (5) strongly agree.

## 2.5. Data analysis

Data gathered was analyzed with SPSS version 26. Frequency and percentage were used to represent the demographic information of the participants. The t-test was used to analyze gender

and English proficiency differences and the contributing factors. The one-way Analysis of Variance (ANOVA) was used to determine the difference in age and year level with English Proficiency and contributing factors. Finally, the regression analysis was used to determine the relationship between English proficiency and the contributing factors.

## 3. Results

Of the 276 students who participated in this study, most of them belonged to 22-24 years old (76.1%), and most were female (80.1%). At least 43.8 percent belonged to level four (4) ([Table 1](#)).

**Table 1:** Demographic profile of participants (N=276)

Indicators	Frequency	Percent
<b>Age</b>		
18-21	63	22.8
22-25	210	76.1
25 years old and above	3	1.1
<b>Gender</b>		
Male	55	19.9
Female	221	80.1
<b>Year Level</b>		
Level2	61	22.1
Level 3	94	34.1
Level 4	121	43.8

[Table 2](#) presents the perceived level of contributing factors and English proficiency of student nurses. Accordingly, the student perceived to have a low level of English proficiency (22.25/55)

and somewhat agreed that environment (3.35/5), peer (3.42/5), teacher (3.53/5), and technology (3.61/5) were contributors to English proficiency.

**Table 2:** Perceived level of contributing factors and English proficiency of student nurses

Variables	Mean	Std. Deviation
Level Proficiency	22.2592	8.69576
Environment	3.3536	1.34338
Peer	3.4293	1.26041
Teacher	3.5284	1.39447
Technology	3.6105	1.37726

[Table 3](#) presents the differences between the participant's demographics, level of English proficiency, and the contributing factors.

The gender of the participants was found significant difference with level of English proficiency ( $t=3.679$ ;  $p<.000$ ), however, there was no significant difference with environment ( $t=.129$ ;  $p>.898$ ), peer ( $t=.255$ ;  $p>.799$ ), teacher ( $t=.515$ ;  $p>.607$ ), and technology ( $t=1.306$ ;  $p>.193$ ). Moreover, the age was found no significant difference with the level of English proficiency ( $F=.618$ ;  $p>.540$ ), environment ( $F=1.415$ ;  $p>.071$ ), and teacher ( $F=2.462$ ;  $p=.087$ ), however, technology ( $F=4.155$ ;  $p>.017$ ) and peer ( $F=1.486$ ;  $p<.044$ ) were found to have a significant difference.

Regarding year level of the participants, there was found no significant difference with English proficiency ( $F=.932$ ;  $p>.395$ ), environment ( $F=.494$ ;  $p>.611$ ), peer ( $F=1.385$ ;  $p>.252$ ), teacher ( $F=1.627$ ;  $p>.198$ ), and technology ( $F=2.23$ ;  $p>.109$ ).

[Table 4](#) presents the relationship between the contributing factors (i.e., environment, peer, teacher,

and technology) and level of proficiency. Accordingly, the environment ( $F=(4,271=9.856$ ,  $p<.000$ )), peer ( $F=(4,271=9.856$ ,  $p<.020$ )), teacher ( $F=(4,271=9.856$ ,  $p<.014$ )) were significant contributors to level of proficiency of the student nurses but no on technology ( $F=(4,271=9.856$ ,  $p>.388$ )).

## 4. Discussion

English is the commonly used medium of instruction in the College of Nursing at Hail University, although the enrollees are predominantly Arabic speakers. It is assumed that the students enrolled in the college had training and education in the English language in their preparatory year before entering nursing school. In addition, many of the reference materials and nursing literature available at the university are written in English. Therefore, the need to understand and comprehend English is of importance.

**Table 3:** Differences between the participants' demographics, level of English proficiency, and the contributing factors

Variable	Indicators	Mean	SD	t	df	Sig. (2-tailed)
Gender						
Level of English proficiency	Male	28.90	13.811	3.679	274	.000
	Female	23.76	7.761			
Environment	Male	3.37	1.150	.129	274	.898
	Female	3.34	1.389			
Peer	Male	3.46	1.135	.255	274	.799
	Female	3.41	1.291			
Teacher	Male	3.61	1.343	.515	274	.607
	Female	3.50	1.408			
Technology	Male	3.82	1.424	1.306	274	.193
	Female	3.55	1.363			
Age		Mean	SD	F	df	Sig
Level of English proficiency	18-21 years old	23.68	9.832	.618	2	.540
	22-25	25.09	9.436			
Environment	25 years old and above	27.00	.000	2.670	2	.071
	18-21	3.20	1.415			
Peer	22-25	3.37	1.31711	3.160	2	.044
	25 years old and above	5.00	.000			
Teacher	18-21	3.58	1.486	2.462	2	.087
	22-25	3.36	1.177			
Technology	25 years old and above	5.00	.000	4.155	2	.017
	18-21	3.74	1.298			
	22-25	3.44	1.418	1.38185	2	
	25 years old and above	4.83	.000			
	18-21	3.97	1.38185	4.155	2	
	22-25	3.48	1.362			
	25 years old and above	4.75	.000			
Year Level						
Level of English proficiency	Level2	23.34	10.125	.932	2	.395
	Level 3	25.34	8.879			
Environment	Level 4	25.09	9.602	.494	2	.611
	Level2	3.41	1.035			
Peer	Level 3	3.43	1.357	1.385	2	.252
	Level 4	3.26	1.468			
Teacher	Level2	3.59	1.267	1.627	2	.198
	Level 3	3.50	1.200			
Technology	Level 4	3.23	1.297	2.232	2	.109
	Level2	3.69	1.174			
	Level 3	3.63	1.390			
	Level 4	3.35	1.488			
	Level2	3.83	1.239			
	Level 3	3.71	1.36			
	Level 4	3.41	1.43			

**Table 4:** Relationship between contributing factors to the level of proficiency

	B	t	Sig.
(Constant)	18.726	11.597	.000
Environment	1.887	2.344	.020
Peer	4.325	4.605	.000
Teacher	-3.294	-2.451	.015
Technology	-.962	-.865	.388
	F (4,271=9.856)	R2=.127	

B. Dependent variable: Level of proficiency

In this current study, the student nurses were found to have a low level of English proficiency. While English is the medium of instruction in the Bachelor of Science in Nursing (BSN) program offered by the universities in Saudi Arabia, most, if not all, respondents have insufficient English skills. In a related study, authors [Alharbi and Yakout \(2018\)](#) noted that Saudi Arabian nursing students struggled to speak and understand English in the classroom and in clinical practices. In context, they strongly suggest a review of the Bachelor of Science in Nursing curriculum and increasing the number of units for the English subject.

Furthermore, to help the nursing students currently enrolled improve their communication skills in English. This study's results indicate the need for broader use of English in all the courses and activities, such as presentations and discussions in the classroom. Moreover, students should be

encouraged to practice their English by having conversations with each other about their lessons.

Student nurses indicate limitations to the environment, peers, teachers, and technology that contributes to their English proficiency. Accordingly, students face difficulties understanding a conversation in a target language as it is often disregarded in the classrooms as most teachers focus more on other skills ([Gilakjani and Sabouri, 2016](#)). To [James \(2019\)](#), nurse educators must be aware of aspects that may influence nursing students' feelings of empowerment, such as personal characteristics and environmental influences. On one note, it is interesting to look into this study's result that gender has a significant influence on English proficiency among the participants, with males appearing to be more skilled at English than their female counterparts are. This can be credited to males being far more exposed to the environment



than females. Males have more significant travel opportunities to learn English and are more accessible to mingle than females. In addition, females are usually more confined within their family's circle. Al-Otaibi's (2004) study posited that most Saudi Arabian women are compelled to stay home. This present result disagrees with Kondo (2018) that gender plays no part in amplifying students' English speaking performance.

The age was significantly different from a peer, where younger student nurses perceived higher scores. This may be because young student nurses have more exposure to their peers using English in their communication. Indeed, according to Samaie et al. (2018), using technology for self-assessment and WhatsApp for oral proficiency takes a lot of work and time, and respondents favor face-to-face interaction for assessment and feedback. Kondo (2018) re-echoed that peer help should be regarded as essential for language learners because students spend so much time collaboratively practicing the language and experience similar challenges. Such a result indicates building and enhancing opportunities for students to interact with a peer who speaks their language as them at home.

Conversely, there was a significant difference between age and technology, where older student nurses scored higher than the younger age group. This can be credited to the empirical practice that older students have more opportunities to navigate technology. The study results showed the effectiveness of technology in education and how it assists in developing students' English communication skills and knowledge, thus contributing to their English speaking performance. Marshall (2002), in his comprehensive study on learning with technology, implied that individuals can learn using technology in education.

The year level was found to have no significant difference with the level of proficiency, environment, peer, teacher, and technology, which suggest that student nurses, regardless of year level, can learn and improve their English proficiency. Although, it is essential to consider that students have their limitations and strengths based on their year level. According to Micán and Medina (2017), students will be successful in their vocabulary learning process when they realize their limitations and strengths in their language learning process. Such results recommend that the nursing instructors continue to initiate dynamic and intelligent interaction between and among peers, students, and teachers in and outside their classes. In addition, it is also essential to connect with students in a forum to get their thoughts on how the university can help improve their English communication skills.

The environment, peers, and teacher were found to be significantly related to the English proficiency of the student nurses. These results suggest that considerations of these factors when improving strategies in teaching using English should be given attention. Kondo (2018) concluded that factors such as environment, peers, teachers, and technology

contribute to students' English performance. However, in this study, technology found no significant association with the level of English proficiency of the students.

This study has its limitation that needs further consideration in the future. For example, English proficiency was measured in general, whereas proficiency in writing, speaking, and listening was not mainly measured. As such, measurement of the latter components can help the educators to identify precisely where they can help the students. Moreover, the setting was conducted in only one setting, the use of convenience sampling, which this study failed to generalize the result, and other demographics that may contribute to the identification of other factors. These limitations can be recommended for other researchers to consider in future studies.

## 5. Conclusion

The students have a low level of English proficiency. Gender was found to have a significant difference in English proficiency. However, there was no significant difference in the environment, peers, teacher, and technology. Moreover, only technology and peer were found to have significant differences with age. The year level of the participants was found to have no significant difference with English proficiency, environment, peer, teacher, and technology. Nursing educators should provide opportunities for students to improve their English in all courses and even in clinical rotations. Such results recommend redesigning language courses to fit the communication demands that have better-prepared students' success.

## Compliance with ethical standards

### Ethical consideration

This research has clearance and approval from the Institutional Review Board (IRB) of the University of Hail. The rights of the participants, confidentiality, respect, and privacy were all ensured.

### Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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