

# THE RELATIONSHIP BETWEEN INTERCULTURAL COMMUNICATION APPREHENSION AND PROFESSIONAL LEARNING LEVEL AMONG FOREIGN NATIONAL MIDWIFERY STUDENTS

Ayşe Çuvadar<sup>1</sup>, Suzan Onur<sup>2</sup>

<sup>1</sup> Department of Midwifery/ Karabuk University, Turkey

<sup>2</sup> Department of Physiotherapy and Rehabilitation / Karabuk University, Turkey

\*([aysecuvadar@hotmail.com](mailto:aysecuvadar@hotmail.com))

**Abstract**-Intercultural communication is defined as the communication process that occurs between people or groups from different cultures. Intercultural communication apprehension, on the other hand, is defined as the anxiety experienced when communicating with people from different groups. This study was conducted to determine the impact of intercultural communication apprehension level on the professional learning level among foreign national midwifery students. The data for this cross-sectional study was collected between February 2023 and April 2023. Prior to the study, approval was obtained from the Social and Humanities Research Ethics Committee of a University (Date: 27.02.2023 and Number: E-77192459-050.99-224243). The population of the study consisted of foreign national students studying in the midwifery department of a university's health sciences faculty in Turkey (N=179). No sampling was performed, and data was collected from 86 students who agreed to participate in the study. The data for the study was collected online using the "Personal Information Form," "Sources and Problems of Motivation Scale," and "Intercultural Communication Apprehension Scale." SPSS version 23 was used for data analysis. Descriptive statistics including mean, standard deviation, and frequency were used to analyze the sociodemographic characteristics of the participants. The relationship between the scales was examined using Pearson correlation analysis. The data obtained was evaluated at a significance level of  $p < 0.05$  and a confidence interval of 95%. The mean age of the students is  $22.8 \pm 1.7$ . The mean score for the Intercultural Communication Anxiety Scale (ICAS) is  $48.5 \pm 8.7$ , indicating that the students experience a moderate level of anxiety. The mean score for the Sources and Problems of Motivation Scale (SPMS) is  $88.9 \pm 12$ . There is a statistically significant moderate positive linear relationship between SPMS and ICAS scores among the students ( $r = 0.491$ ,  $p < 0.001$ ).

As a result of this study, it was found that first-year students experience more intercultural communication anxiety compared to other students and as students' intercultural communication anxiety increases, their sources of motivation and problems also increase.

*Keywords – Cross-Cultural Communication; Concern; Foreign National*

## I. INTRODUCTION

Intercultural communication apprehension is related to the anxiety experienced when communicating with people from different groups [1]. This anxiety includes linguistic abilities, emotional expression differences, and changes in communication styles.

During this process, individuals' cultural differences, communication styles, beliefs and values, behavioral patterns, and language use may differ from one another. Therefore, communicating with individuals from different cultural backgrounds is a more complex process. For

example, the meaning of a word or expression in one culture may be different from its meaning in another culture. This situation can lead to difficulties in understanding each other and even to misunderstandings during the communication process [2].

Tone of voice, body language, and many other factors contribute to the formation of meaning in cross-cultural communication. For example, using gestures to support an expression or making direct eye contact while speaking may be considered natural in some cultures, but unacceptable or disrespectful in others. Therefore, in cross-cultural communication, it is important for individuals to understand and respect each other's cultures, values, and behavioral patterns [2].

In this process, factors such as social belonging, similarity, shared communication network, and attractiveness can reduce anxiety [3]. In addition, being familiar with other cultures, making cultural comparisons, and learning from cross-cultural communication conflicts can also minimize anxiety [4].

Midwifery education is carried out by combining theoretical and clinical practices. Clinical practices help students reinforce their theoretical knowledge and improve their professional skills. The students' level of professional motivation, learning willingness, clinical practice expectations, and the degree to which these expectations are met can all affect the development of their professional skills in theoretical and applied courses [5], [6].

Therefore, clinical practice plays a significant role in midwifery education, and students' professional motivation level, willingness to learn, and expectations being met affect their success in clinical practice. Education programs can be organized in a way that reduces students' intercultural communication anxiety and prioritizes the needs of foreign students. This way, while developing students' professional skills, their intercultural communication skills can also be improved. This study aims to determine whether intercultural communication anxiety affects the level of professional learning in foreign midwifery students.

## II. MATERIALS AND METHOD

### *Type of the Research:*

This study was designed as a descriptive study to determine the effect of intercultural communication anxiety level on vocational learning level in midwifery students.

### *Location and Time of the Research:*

The data of the research were collected from foreign national midwifery students studying at a university's Faculty of Health Sciences in Turkey between February 2023 and April 2023.

### *Population and Sample of the Study:*

The population of the study consisted of foreign students enrolled in the midwifery department of a university's Faculty of Health Sciences in Turkey (N=179). The sample was not selected, and data for the study was collected from 86 students who agreed to participate.

### *Data Collection Forms:*

The data for the study was collected online using "Personal Information Form", "Sources and Problems of Motivation Scale" and "Intercultural Communication Anxiety Scale".

### *Personal Information Form:*

The form prepared by the researchers includes 9 questions about the socio-demographic characteristics of individuals.

### *The Motivation Sources and Problems Scale (MSPS):*

The Motivation Sources and Problems Scale was developed by Acat and Köşgeroğlu (2006) [7]. The scale consists of a total of 24 items, 11 of which are related to intrinsic motivation (items 1, 2, 3, 4, 6, 7, 8, 9, 10, 23, 24), 5 of which are related to extrinsic motivation (items 13, 14, 15, 17, 20), and 8 of which are related to negative motivation (items 5, 11, 12, 16, 18, 19, 21, 22). The scale aims to determine the levels of intrinsic, extrinsic, and negative motivation. The minimum and maximum scores that can be obtained from the intrinsic motivation section are "11-55", from the extrinsic motivation section are "5-25", and from the negative motivation

section are "8-40". In total, a minimum of 24 and a maximum of 120 points can be obtained from the scale. The higher the score obtained, the higher the motivation level. The score for each subscale is determined by taking the arithmetic mean of the relevant subscale items. The Cronbach's alpha coefficient of the motivation sources and problems scale (MSPS) developed by Acat and Köşgeroğlu (2006) was reported as .82. In our study, the Cronbach's alpha coefficient was found to be .84 [7].

#### *The Intercultural Communication Apprehension Scale (PRICA):*

The scale was developed by McCroskey in 1997 to determine whether individuals have communication apprehension for effective and sustainable communication. Each item on the scale is rated on a 5-point Likert-type scale ranging from "strongly disagree" (1 point) to "strongly agree" (5 points). Step 1: The odd-numbered items (1, 3, 5, 7, 9, 10) are summed. Step 2: The even-numbered items (2, 4, 6, 8, 11, 12, and 13) are summed, but the scores are first reversed (i.e., 5 becomes 1, 4 becomes 2, etc.). Step 3: The two sums are added together to obtain a total score for the PRICA scale. The total score can range from 13 to 65, with higher scores indicating higher levels of communication apprehension. The Intercultural Communication Apprehension Scale (PRICA) was developed by McCroskey in 1997 to determine whether individuals have communication apprehension in order to achieve effective and sustainable communication. The scale's items are rated on a 5-point Likert-type scale ranging from "strongly disagree" (1 point) to "strongly agree" (5 points). The Turkish adaptation of the original 14-item PRICA scale consists of 13 items (the 14th item has been removed), with items 2, 4, 6, 8, 11, 13 (and 14) being reverse-coded. When calculating the total score of the scale, Step 1 involves adding up the scores of items 1, 3, 5, 7, 9, and 10, and Step 2 involves adding up the scores of items 2, 4, 6, 8, 11, 12, and 13. The formula for the total score is: (Step 1 total score + Step 2 total score). The maximum value that can be obtained from the scale is 65, and the minimum value is 13. A score of less than 32 indicates low intercultural communication

apprehension, a score of over 52 indicates high intercultural communication apprehension, and a score between 32 and 52 indicates moderate intercultural communication apprehension. The Cronbach's alpha reliability coefficient of the scale developed by McCrosky is .88. In our study, the

Cronbach's alpha coefficient was found to be .82 [8].

#### *The Ethical Principles of the Study:*

Prior to the study, approval was obtained from a University's Social and Behavioral Sciences Research Ethics Committee (Date: 27.02.2023 and Number: E-77192459-050.99-224243). Necessary permissions were obtained for the measurement tools to be used in the study. In order to protect the rights of the participating students, before collecting research data; a "Informed Consent Form" and a "Voluntary Participation Form" were provided and explained in written and oral form, which includes the purpose, duration, and procedures of the research.

#### *Statistical Analysis:*

SPSS version 23 was used for data analysis. It was observed that the Skewness and Kurtosis values of the data remained within the range of +2.0/-2.0, indicating that the data followed a normal distribution [9]. Descriptive statistics including mean, standard deviation, and frequency were used for the participants' socio-demographic characteristics. One-Way ANOVA test was used for metric data. The relationship between the scales was examined using Pearson correlation analysis. Cronbach's Alpha coefficient was calculated. The obtained data were evaluated at a significance level of  $p < 0.05$  with a 95% confidence interval.

### III.RESULTS

When examining the socio-demographic characteristics of the students, it was found that their average age was  $22.8 \pm 1.7$ , 20.9% were married, 55.8% came from an extended family, 62.8% spent the majority of their lives in the city, 57% were residing in a student dormitory, and 44.2% had income equal to their expenses.

Table 1. Mean Scores of Students on the Scales and Subdimensions (n = 86)

	$\bar{X}\pm SD$	Min-Max
Intercultural Communication Anxiety Scale	48,5±8,7	19-61
Sources and Problems of Motivation Scale	88,9±12	57-113
Subscale Mean Scores of Sources and Problems of Motivation Scale		
Extrinsic Motivation Subscale Mean Score	19,4±3,6	10-25
Intrinsic Motivation Subscale Mean Score	42,9±7,9	13-54
Negative Motivation Subscale Mean Score	26,5±5,5	16-40

$\bar{X}$ : Mean, SD: Standard Deviation

The mean score of students on the Intercultural Communication Anxiety Scale was found to be 48.5±8.7, indicating a moderate level of anxiety.

The mean score of students on the Motivation Sources and Problems Scale was 88.9±12.

Table 2. Comparison of Intercultural Communication Apprehension Scale Mean Scores according to Students' Class Level

Variable	Groups	Number(n)	$\bar{X}\pm SS$	Test Statistic	P
Grade	First grade <sup>1</sup>	7	39,28± 15,61	F = 3.197**	<0.001*
	Second grade <sup>2</sup>	16	50,56 ± 5,26		
	Third grade <sup>3</sup>	30	49,00 ± 8,00		
	Fourth grade <sup>4</sup>	33	49,00 ± 8,02		

\* = p < 0.05, F = One-way Analysis Variance

\*\* Benferroni = 1>2, 1>3, 1>4

The scale score averages of the students according to their grade level were evaluated by One-Way ANOVA. As a result of the analysis, a statistically significant difference was found between the groups (p < 0.001). To determine which groups the difference was between, Bonferroni post-hoc analysis was conducted. The analysis showed that the difference was between the first year and other grades (Table 2).

There was a statistically significant difference in the scale score averages among the students' income levels (p < 0.001). Further analysis revealed that the difference was between those with equal income and those with lower income.

There was no statistically significant difference in the scale score averages among the students' marital status.

Table 3. Correlation analysis between PRICA, MSPS and their sub-dimensions

	1	2	3	4	5
1. PRICA	1,000				
2. MSPS	0,491**	1,000			
3. Internal motivation,	0,354**	0,889**	1,000		
4. External motivation	0,261*	0,720**	0,723**	1,000	
5. negative motivation	0,392**	0,7431**	0,024	-0,132	1,000

\*: p<0,05, \*: p<0,001.

The relationship between the Motivational Sources and Problems Scale and its Sub-dimensions for students was examined through Pearson correlation analysis. As a result of the analysis, there is a very strong positive significant linear relationship at a moderate level between the Internal Total Sub-dimension and the Motivational Sources and Problems Scale for students (r=0.889, p<0.001).

There is a strong positive significant linear relationship between the External Total Sub-dimension and the Motivational Sources and Problems Scale for students (r=0.720, p<0.001). There is a moderate positive significant linear relationship between the Negative Total Sub-dimension and the Motivational Sources and Problems Scale for students (r=0.431, p<0.001).

There is a statistically significant, moderately positive linear relationship between the Motivation Sources and Problems Scale for Students and the Intercultural Communication Apprehension Scale ( $r=0.491$ ,  $p<0.001$ ).

#### IV.CONCLUSION

These results reveal the relationship between students' cross-cultural communication anxiety and motivation sources. The Cross-Cultural Communication Anxiety Scale used in the study indicates that students experience moderate levels of anxiety, while the Motivation Sources and Problems Scale scores were found to be high. However, a statistically significant positive relationship was found between motivation sources and cross-cultural communication anxiety among students. These results suggest that motivation sources may play an important role in reducing students' cross-cultural communication anxiety.

The study found that first-year students experienced more intercultural communication anxiety than other students, and as their intercultural communication anxiety increased, their sources of motivation and problems also increased. The results demonstrate that intercultural communication anxiety among midwifery students can affect their professional development. Therefore, it may be recommended to conduct studies to develop intercultural communication skills in midwifery education. Additionally, special lessons can be offered to students to prepare them for intercultural communication problems they may encounter during clinical practice. Moreover, it is also recommended to emphasize intercultural communication in midwifery education and present various examples of cases from different cultures to students. This could help students improve their intercultural communication skills and reduce their anxiety.

Additionally, advanced analysis based on the students' income level revealed that the difference in cultural communication anxiety was between those who had equal income and those with lower income. Therefore, it is recommended to provide programs and resources that will improve intercultural communication skills for students with lower

income in order to reduce their anxiety. These programs can provide opportunities for students to interact with different cultures, which can reduce prejudice and increase intercultural understanding.

#### REFERENCES

- [1] Neuliep, JW., McCroskey, JC. (1997). The Development of Intercultural and Interethnic Communication Apprehension Scales. *Communication Research Reports*, 14, 145-156.
- [2] Aksoy, IU (2023). Evaluation on the Critical Reading of "Intercultural Communication" as a Field.
- [3] Gudykunst, WB (1998) Applying Anxiety/Uncertainty Management (AUM) Theory to Intercultural Adjustment Training, *Int. J. Intercultural Rel*, 2(22), 227250.
- [4] Lu, W ve Wan, J (2012) On Treating Intercultural Communication Anxiety of International Students in China, *World Journal of Education*, 2(1), 55-61.
- [5] Beydağ KD, Gündüz A, Gök Özer F. Attitudes and expectations of health college students towards their education and profession. *Pam Med J* 2008;1(3):137-142.
- [6] Şanlı T, Saraçlı S. Analysis of factors affecting university students' future expectations. *KAÜ Journal of Economics and Administrative Sciences* 2015;6(11):25-36.
- [7] Acat MB, Köşgeroğlu N. Sources and problems of motivation scale. *Anatolian Journal of Psychiatry* 2006; 7:204-210.
- [8] Ay, E., Kavuran, E., & Turkoglu, N. (2018). Intercultural Communication Apprehension Scale (PRICA): Validity and Reliability Study in Turkish. *International Journal of Caring Sciences*, 11 (3).
- [9] George, D. (2011). *SPSS for windows step by step: A simple study guide and reference*, 17.0 update, 10/e. Pearson Education India.