

Investigation of intercultural competence among nursing students: perspectives from Northern Cyprus

Badanie kompetencji międzykulturowych wśród studentów pielęgniarstwa: perspektywy z Cypru Północnego

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STRESZCZENIE

BADANIE KOMPETENCJI MIĘDZYKULTUROWYCH WŚRÓD STUDENTÓW PIELĘGNIARSTWA: PERSPEKTYWY Z CYPRU PÓŁNOCNEGO

Cel pracy. Celem niniejszego badania jest określenie poziomu skuteczności międzykulturowej, świadomości i wrażliwości studentów pielęgniarstwa studiujących na Cyprze Północnym.

Materiał i metody. Niniejsze badanie ma charakter przekrojowo-porównawczy. Wielkość próby określono za pomocą oprogramowania G*Power, a do jej doboru zastosowano metodę doboru wygodowego. Próbę stanowią studenci pielęgniarstwa (n = 406) z Wydziału Pielęgniarstwa. Wyniki badania przedstawiono zgodnie z wytycznymi STROBE. Dane uzyskano za pomocą kwestionariusza socjodemograficznego, skali świadomości wielokulturowej, skali wrażliwości międzykulturowej oraz skali skuteczności międzykulturowej. Dane analizowano przy użyciu programu statystycznego SPSS 22.0.

Wyniki. Średnie wyniki uczestników wyniosły 49,79 ± 12,76 w Skali Skuteczności Międzykulturowej, 16,46 ± 5,22 w Skali Świadomości Wielokulturowej oraz 51,00 ± 13,66 w Skali Wrażliwości Międzykulturowej. Studenci afrykańscy uzyskali wyższe wyniki niż studenci tureccy w podskali elastyczności behawioralnej (t = 2,271; p = 0,024). Ponadto stwierdzono, że studenci czwartego roku wykazywali wyższy poziom szacunku w interakcjach (F = 3,905; p = 0,021) w porównaniu ze studentami drugiego roku.

Wnioski. Stwierdzono, że skuteczność międzykulturowa i wrażliwość międzykulturowa studentów pielęgniarstwa były poniżej średniej, podczas gdy poziom świadomości wielokulturowej był stosunkowo wyższy. Wyniki wskazują na istotne różnice w zależności od narodowości, roku studiów oraz doświadczeń międzynarodowych. W związku z tym włączenie kompetencji międzykulturowych do wszystkich przedmiotów w ramach programu studiów pielęgniarstwa oraz wspieranie międzynarodowych programów wymiany mogłoby przyczynić się do podniesienia kompetencji kulturowych.

Słowa kluczowe: świadomość, pielęgniarstwo, kompetencje kulturowe, wrażliwość kulturowa, pielęgniarstwo międzykulturowe

ABSTRACT

INVESTIGATION OF INTERCULTURAL COMPETENCE AMONG NURSING STUDENTS: PERSPECTIVES FROM NORTHERN CYPRUS

Aim. This study aims to determine the intercultural effectiveness, awareness and sensitivity of nursing students studying in Northern Cyprus.

Material and methods. This study is a cross-sectional comparative study. The sample size for the study was determined using G*Power software, and convenience sampling method was used. The sample is constituted of nursing students (n = 406) from the nursing faculty. The study was reported in accordance with the STROBE guidelines. Data were obtained through the use of Sociodemographic Questionnaire, the Multicultural Awareness Scale, the Intercultural Sensitivity Scale and Intercultural Effectiveness Scale. The data were analysed using SPSS 22.0 statistical programme.

Results. The participants' average scores were respectively: 49.79 ± 12.76 on the Intercultural Effectiveness Scale, 16.46 ± 5.22 on the Multicultural Awareness Scale, and 51.00 ± 13.66 on the Intercultural Sensitivity Scale. African students scored higher than Turkish students on the behavioural flexibility subscale (t = 2.271; p = .024). Furthermore, it was found that fourth-year students possessed a higher level of interaction respect (F = 3.905; p = .021) compared to second-year students.

Conclusions. The intercultural effectiveness and sensitivity of nursing students were found below average, while multicultural awareness levels were relatively higher. The findings indicate significant differences based on nationality, academic year, and international experiences. In this regard, integrating intercultural competence into all courses within the nursing curriculum and supporting international exchange programmes could enhance cultural competence.

Key words: awareness, nursing, cultural competence, cultural sensitivity, transcultural nursing

INTRODUCTION

The culture is the set of values, shared beliefs, attitudes and behaviours, rituals and traditions, which a group of people learn, share and pass through generations [1]. The intercultural efficacy, understanding, and sensitivity of nurses who make up the largest group in the health sector in the globalising world and care for people from other cultures are crucial in this context. [2]. In addition to culturally appropriate physical care, nursing care, which must be provided from a holistic perspective, should include practices that are grounded in culture from a social and psychological standpoint, with the nurse playing an essential role in this regard.

Intercultural exchange and interaction is an increasingly important issue in today's globalised world. It is a basic fact of current society that different cultures from all over the world come together, co-operate and communicate [3]. While this cultural diversity acts as a bridge that connects people, it can also be a source of conflict and disagreement. At this point, intercultural effectiveness, awareness and sensitivity concepts become important competences for societies and professional groups [4,5].

Intercultural effectiveness described as the capability of both individuals and organisations to interact and collaborate effectively across cultures [6]. This is not only limited to being able to speak the same language. It also includes a deep understanding and skills such as understanding different worldviews, empathy, openness and tolerance [7]. Multicultural awareness and sensitivity are integral to intercultural effectiveness. Individuals need to have this awareness in order to understand the values, beliefs, behaviour patterns and communication styles of people from different cultures. In this way, they can communicate effectively without prejudice [8].

In a human-centred profession such as nursing, the importance of multicultural awareness, effectiveness and sensitivity is even greater. In healthcare, patients and healthcare professionals often interact with people from different cultural backgrounds. Although today's modern healthcare systems are often referred to as "national," it is evident that the healthcare professionals working within these systems are multicultural and multilingual. In this context, both the multicultural nature of healthcare providers and the fact that patients come from diverse cultural backgrounds create a multifaceted intercultural interaction [9]. Therefore, examining and developing the concept of "intercultural competence" is crucial for these two groups to understand one another in clinical settings and to ensure the continuity of care. Understanding patients within their cultural context and respecting their cultural values is critical to increase patient satisfaction and improve care processes [10].

Northern Cyprus stands out as a country with its own cultural richness. In addition to cultural harmony, the increasing coexistence of different cultures, driven by the ongoing process of globalization, leads to greater intercultural effectiveness, awareness, and sensitivity [11].

Despite the recognized importance of intercultural competence in nursing, there remains limited empirical evidence on this topic in specific regional contexts. In particular, existing literature provides insufficient insight into the intercultural competence levels of nursing students in this setting. Northern Cyprus represents a culturally diverse educational environment where students from different nationalities study together, providing a unique context for the development of intercultural exposure translates into intercultural effectiveness, awareness, and sensitivity among nursing students remain unclear. Therefore, there is a need for context specific evidence to better understand the current situation and guide educational improvements. Based on this rationale, the present study aims to determine the intercultural effectiveness, awareness and sensitivity levels of nursing students studying in Northern Cyprus.

MATERIALS AND METHODS

Cross-sectional and comparative research design was employed in this study. Observational studies that examine data obtained from a population at a single point in time are defined as cross-sectional studies [12]. The comparative design is about evaluating the relationship between one study object and another [13]. Since this study is observational in nature, it was designed based on the STROBE criteria from the EQUATOR checklist guidelines [14].

Study settings

This study was carried out in the nursing faculty in Northern Cyprus between June and August 2024. The nursing faculty, bearing the distinction of being the foremost and sole nursing faculty in Northern Cyprus, provides theoretical instruction in various domains. The faculty boasts a student body of 450 international students and 500 Turkish students. Additionally, the nursing faculty presents an intercultural learning environment, with faculty members hailing from diverse nations. Accordingly, the faculty gives students and academic staff the chance to utilise cultural diversity as a singular advantage. In addition, in the faculty's curriculum, a culture-related elective course is offered in the second year (third semester), which is the period when students begin clinical practice in hospitals and come into contact with patients.

Sample Selection

In this study, the sample size was calculated using the G*Power software, based on the independent samples t-test. As there were no previous studies reporting effect sizes for similar variables in similar populations, the calculation was based on a medium effect size ($d = 0.50$) as proposed by Cohen [15]. With an alpha level of 0.05 and a statistical power of 0.80, the required minimum sample size was calculated as $n = 216$. Convenience sampling method was used. During the study, a total of $n=406$ nursing students were reached. Including more participants than the minimum sample size enhances the reliability of the results and increases the power of statistical estimates.

Inclusion criteria for the study:

- Ability to speak Turkish or English,
- Being a nursing student,
- Individuals aged 18 or older were included in the study.

Exclusion criteria for the study:

- Individuals who do not use a smartphone, tablet, or computer,
- Individuals without internet access,
- Individuals who did not agree to participate in the study were excluded.

Data collection

In this study, data were obtained through Sociodemographic Questionnaire, Intercultural Effectiveness Scale, Multicultural Awareness Scale and Intercultural Sensitivity Scale. Since the study involved participants from two different language groups, one speaking English and the other Turkish, permission was obtained from the scale developers and from studies that had conducted validity and reliability analyses for both languages. The English version of the scale was administered to the English-speaking group, and the Turkish version to the Turkish-speaking group. Data collection was conducted using Google Forms and separate sessions were scheduled for each year group, in which students were introduced to the forms in the classroom setting. The Google Form link was shared with the student groups and displayed on the classroom screen via a QR code at the same time. The students filled out the form using the device of their choice (smartphone, tablet, or computer). Both researchers were involved in the data collection process to address potential noise issues or any other problems in the classroom setting. The study participants were informed about the purpose and scope of the study, as well as their right to withdraw from the study at any time. During this process, participants were asked to confirm that they had provided their informed consent, both verbally and in the form. Subsequently, the forms were completed within 20 minutes after the relevant links were shared. In this process, Google Forms usage speeds up the data collection process and reduces printing costs.

Study tools

Sociodemographic questionnaire

This form was developed by the researchers by literature in both languages which are Turkish and English to identify the characteristics of the nursing students with six questions [16]. These questions are: age, nationality, class, economic condition, transcultural education background, being abroad before.

Intercultural effectiveness scale

The Intercultural Effectiveness Scale was developed by Portalla and Chen in 2010 and calculated the Cronbach's alpha coefficient for this scale as 0.85 [17]. The Turkish validity and reliability study of the scale was carried out by Yakar and Alpar. The scale consists of 20 items and has 6 sub-dimensions. These sub-dimensions are: behavioral flexibility, interaction relaxation, interactant respect, message skills, identity maintenance, and interaction management. This scale is a 5-point Likert scale with 1 representing 'strongly disagree' and 5 representing 'strongly agree'. The minimum score that can be obtained from the scale is 20, while the maximum score is 100. Similar to the original scale, the Cronbach's alpha coefficient of the scale was calculated as 0.85. Higher score indicates stronger intercultural effectiveness [18]. In this study, the Cronbach's alpha value for the scale was calculated as 0.79.

Multicultural awareness scale

The multicultural Awareness Scale, which was developed by Awang Rozaimie, Shuib, Ali and others in 2011. Cronbach's alpha coefficient ranged from 0.39 to 0.68 for the subscales [19]. The Turkish validity and reliability study of the scale was conducted by Yakar and Alpar. The scale consists of 9 items. This is 5-point Likert type with 1 representing 'strongly disagree' and 5 representing 'strongly agree'. The scale has been validated in Turkish as a unidimensional scale and the minimum score that can be obtained from the scale is 9 while the maximum score is 45. Following the validity and reliability analysis of the scale, the Cronbach's alpha coefficient value was found as 0.73. Lower scores obtained from the scale indicate a higher level of Multicultural Awareness [20]. In this study, the Cronbach's alpha value for the scale was calculated as 0.64.

Intercultural sensitivity scale

The intercultural sensitivity scale was developed by Chen and Starosta in 2000 and calculated the Cronbach's alpha coefficient for this scale as 0.86 [21]. The Turkish validity and reliability study of the scale was conducted by Bulduk et al. The scale consists of 24 items and has five sub-dimensions. The sub-dimensions of the scale are: responsibility in communication, respect for cultural differences, self-confidence in communication, liking communication and being careful in communication. The scale consists of 5-point Likert type, where 1 represents 'strongly disagree' and 5 represents 'strongly agree'. The minimum score that can be obtained from the scale is 24 and the maximum score is 120. Following the validity

and reliability analysis of the scale, the Cronbach's alpha coefficient value was found as 0.72. The higher score obtained from the scale indicates an increase in the level of cultural sensitivity [22]. In this study, the Cronbach's alpha value for the scale was calculated as 0.84.

Data analysis

The data were analysed using IBM SPSS version 22.0 (SPSS Inc., Chicago, Illinois, USA). The normality of the data was assessed using the Shapiro-Wilk test, and to support this analysis, the data were also examined using skewness and kurtosis values as well as graphical methods. According to these analyses, it was determined that the data were not normally distributed. For this reason, Mann-Whitney U analyses were used in comparing the two groups and the Kruskal Wallis analysis was used to compare more than two groups. In order to identify differences between the groups in the study, the independent-samples t-test and the one-way ANOVA were used as advanced statistical tests. The statistical significance level for the analyses was set to $p < 0.05$.

Ethical aspects of the research

Institutional permissions were obtained from the Scientific Research Ethics Committee to proceed with this study (project no: 2024/124-1851). Furthermore, the necessary permissions were obtained from all scale authors. Verbal consent was obtained from participants during the data collection process, and the form also included a consent section where participants provided their consent. The research questions did not ask participants for personal information, and no personal data was recorded in the form. In this way, the participants' anonymity was protected. During this process, the participant data collected via Google Forms was stored in an electronic format accessible only to the two researchers conducting the study. In order to perform data analysis, the participant data was downloaded to a secure computer and evaluated. All participant data, stored anonymously, will be permanently deleted five years after the date of collection. Selection bias was minimised by applying pre-defined inclusion and exclusion criteria to the participants recruited for the study. Furthermore, information bias was minimised by using Likert-type scales that had undergone validity and reliability testing in both languages. This research was conducted in accordance with the Declaration of Helsinki.

RESULTS

The average age of the participants was 22.40 ± 3.59 , and nearly half (49.3%) were Turkish students. More than half of the participants (64.6%) were second-year students, and it was found that the vast majority of them (69.5%) had an income equal to their expenditure. The vast majority of participants (70.9%) had never travelled abroad, however, the vast majority of them (78.1%) reported that had previously received training about transcultural nursing (Table 1).

On the Intercultural Effectiveness Scale, which ranges from 20 to 100 points, the average score achieved by participants was 49.79 ± 12.76 . On the Multicultural Awareness Scale, which ranges from 9 to 45 points, the participants' average score was 16.46 ± 5.22 . On the Intercultural Sensitivity Scale, which ranges from 24 to 120 points, the participants' average score was 51.00 ± 13.66 (Table 2).

When certain characteristics of the participants were compared with the total and subscale scores of the Intercultural Effectiveness Scale, significant differences were

■ Tab. 1. Sociodemographic characteristics of participants (n=406)

Variables		n	%
Nationality	Turkish	200	49.3
	Nigerian	145	35.7
	Kenyan	11	2.7
	Cameroonian	7	1.7
	Zimbabwean	4	1.0
	Other	39	9.6
Class	Second	262	64.6
	Third	76	18.7
	Fourth	68	16.7
Economic Situation	Income more than expenses	44	10.8
	Income equal with expenses	282	69.5
	Income less than expenses	80	19.7
Being Abroad Before	Yes	118	29.1
	No	288	70.9
Educated Before about Transcultural Nursing	Yes	317	78.1
	No	89	21.9

■ Tab. 2. Intercultural effectiveness, sensitivity and multicultural awareness and subscales and total points

	This Study		X $\pm$ Sd
	Min	Max	
Intercultural Effectiveness Scale	23	96	49.79 $\pm$ 12.76
Multicultural Awareness Scale	9	35	16.46 $\pm$ 5.22
Intercultural Sensitivity Scale	24	104	51.00 $\pm$ 13.66

■ Tab. 3. Comparison of intercultural effectiveness subscale and total scale scores by some characteristics

	Behavioral Flexibility		Interaction Relaxation		Interaction Respect		Message Skills		Identity Maintenance		Interaction Management		Total Scale	
	H*	p	H	p	H	p	H	p	H	p	H	p	H	p
Nationality	9.16	.16	10.82	.09	12.25	.05	17.96	.00	11.38	.07	20.65	.00	13.70	.04
Class	1.13	.28	0.00	.94	0.10	.75	0.00	.98	4.79	.02	0.03	.85	1.00	.63
Economic Situation	4.84	.08	0.76	.68	9.89	.00	0.97	.61	1.30	.05	1.76	.41	3.25	.30

* H: Kruskal-Wallis

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found between nationality and the interaction respect ($H=12.25$, $p=.05$), message skills, ($H=17.96$, $p=.00$), interaction management ($H=20.65$, $p=.00$) subscales and total scale score ($H=13.70$, $p=.04$) of the scale. Similarly, when the identity maintenance subscale was examined in relation to participants' groups ($H=4.79$, $p=.02$) and the interaction respect subscale was examined in relation to their economic situations ($H=9.89$, $p=.00$) significant statistical differences were found (Table 3).

When the total and subscale scores of the Multicultural Awareness Scale were examined in relation to certain participant characteristics, significant statistically differences were found between nationality and the cultural awareness ($H=36.80$, $p=.00$), cultural communication on awareness ($H=51.62$, $p=.00$), and perceived cultural awareness ($H=169.12$, $p=.00$) subscales, as well as the total scale score

■ Tab. 4. Comparison of intercultural effectiveness subscale and total scale scores by some characteristics

	Cultural Awareness		Cultural Communication Awareness		Perceived Cultural Awareness		Total Scale	
	H*	p	H	p	H	p	H	p
Being Abroad Before	16933.00	.95	13689.50	.00	12792.00	.00	14471.5	.31
Educated about Transcultural Nursing	12616.00	.12	12588.00	.11	11133.00	.00	12112.33	.11
	U**	p	U	p	U	p	U	p
Being Abroad Before	16933.00	.95	13689.50	.00	12792.00	.00	14471.5	.31
Educated about Transcultural Nursing	12616.00	.12	12588.00	.11	11133.00	.00	12112.33	.11

*H: Kruskal-Wallis; **U: Mann-Whitney U

■ Tab. 5. Comparison of intercultural sensitivity subscale and total scale scores by some characteristics

	Responsibility in Communication		Respect for Cultural Differences		Confidence in Communication		Enjoy Communication		Be Careful in Communication		Total Scale	
	H*	p	H	p	H	p	H	p	H	p	H	p
Nationality	11.94	.06	9.26	.15	7.57	.27	33.35	.00	12.59	.05	14.94	.10
Economic Situation	0.95	.62	6.57	.03	3.00	.22	5.00	.08	0.54	.76	3.21	.34
	U**	p	U	p	U	p	U	p	U	p	U	p
Being Abroad Before	16146.00	.42	15008.00	.06	14741.00	.03	16375.50	.56	16035.00	.36	15661.00	.28

*H: Kruskal-Wallis; **U: Mann-Whitney U

■ Tab. 6. Post-hoc analyses of the scales in terms of the sociodemographic characteristics of the participants

		Nationality 1: African 2: Turkish	Class 2,3,4	Economic Situation 1: Income More Than Expenses 2: Income Equal with Expenses 3: Income Less Than Expenses	Being Abroad Before 1: Yes 2: No	Education Before about Transcultural Nursing 1: Yes 2: No
Intercultural Effectiveness Scale	Behavioral Flexibility	1 > 2 $t^*=2.271$; $p=.024$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Interaction Relaxation	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Interaction Respect	$p>.05$	4 > 2 $F^{**}=3.905$; $p=.021$	2 < 3 $F=5.633$; $p=.004$	$p>.05$	$p>.05$
	Message Skills	2 > 1 $t=-1.998$; $p=.046$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Identity Maintenance	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Interaction Management	2 > 1 $t=-3.129$; $p=.002$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Total Scale	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
Multicultural Awareness Scale	Cultural Awareness	2 > 1 $t=-6.267$; $p=.001$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Cultural Communication Awareness	1 > 2 $t=7.008$; $p=.001$	4 > 2, 4 > 3 $F=10.932$; $p=.001$	$p>.05$	1 > 2 $t=3.670$; $p=.001$	$p>.05$
	Perceived Cultural Awareness	2 > 1 $t=-14.726$; $p=.001$	2 > 3, 2 > 4 $F=13.308$; $p=.001$	$p>.05$	1 > 2 $t=-4.144$; $p=.001$	1 > 2 $t=-2.889$; $p=.004$
	Total Scale	2 > 1 $t=-6.453$; $p=.001$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
Intercultural Sensitivity Scale	Responsibility in Communication	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Respect for Cultural Differences	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Confidence in Communication	$p>.05$	$p>.05$	$p>.05$	1 > 2 $t=-2.113$; $p=.035$	$p>.05$
	Enjoy Communication	2 > 1 $t=-4.453$; $p=.001$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Be Careful in Communication	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$
	Total Scale	$p>.05$	$p>.05$	$p>.05$	$p>.05$	$p>.05$

*t: Independent-sample t-test; **F: One-way ANOVA

($H=85.84$, $p=.00$). A statistically significant difference was found between the participants' groups and the perceived cultural awareness subscale ($H=18.97$, $p=.00$). Similarly, a statistically significant difference was found between participants' status of being abroad before and the subscale of cultural communication awareness ($U=13689.50$, $p=.00$) and perceived cultural awareness ($U=12792.00$, $p=.00$). On the other hand, a statistically significant difference was found between participants' prior education in transcultural nursing and the subscale of perceived cultural awareness ($U=11133.00$, $p=.00$) (Table 4).

When comparing certain participant characteristics with the total Intercultural Sensitivity Scale total score and its subscale scores, a statistically significant difference was found between nationality and the enjoy communication ($H=33.35$, $p=.00$) and be careful in communication ($H=12.59$, $p=.05$) subscales. Additionally, a statistically significant difference was found between economic situation and the respect for cultural differences ($H=6.57$, $p=.03$) subscale. The analysis also identified a statistically significant difference between participants' prior experience being abroad and the confidence in communication ($U=14741.00$, $p=.03$) subscale (Table 5).

When participants' scale scores were compared according to their socio-demographic characteristics, African students scored higher on behavioural flexibility ($t=2.271$, $p=.024$) and cultural communication awareness ($t=7.008$, $p=.001$), whereas Turkish students scored higher on message skills ($t=-1.998$, $p=.046$), interaction management ($t=-3.129$, $p=.002$), cultural awareness ($t=-6.267$, $p=.001$), perceived cultural awareness ($t=-14.726$, $p=.001$), total multicultural awareness ($t=-6.453$, $p=.001$), and enjoyment of communication ($t=-4.453$, $p=.001$). Fourth-year students demonstrated higher interaction respect ($F=3.905$, $p=.021$), cultural communication awareness ($F=10.932$, $p=.001$), and being careful in communication ($F=4.845$; $p=.008$) than lower-year students, whereas second-year students reported higher perceived cultural awareness ($F=13.308$, $p=.001$). In addition, previous international experience was positively associated with cultural communication awareness ($t=3.670$, $p=.001$), perceived cultural awareness ($t=-4.144$, $p=.001$), and confidence in communication ($t=-2.113$, $p=.035$), while prior education on transcultural nursing was associated with higher perceived cultural awareness scores ($t=-2.889$, $p=.004$) (Table 6).

DISCUSSION

The importance of levels of intercultural effectiveness, awareness, and sensitivity among nurses are significant because they constitute the largest professional group providing healthcare. The number of patients receiving care from nurses with diverse cultural backgrounds has been increasing over the years further underscores the importance of these concepts within the profession [9].

Intercultural effectiveness refers to the ability of both individuals and organizations to interact effectively and collaborate with other cultures [7]. When evaluating the cultural effectiveness of midwifery students, it was found that the students had a high level of cultural effectiveness [23].

In another study healthcare workers' levels of cultural effectiveness were found as moderate [24]. A review of the literature reveals that Kedikoğlu has shown that there is a relationship between intercultural effectiveness and identity maintenance and students' class [23]. Similarly, in Demiral's study, the study authors stated that there was no relationship between intercultural effectiveness and gender, educational status and having been abroad before [25]. Although the level of intercultural effectiveness was found to be below average in this study, it was observed that intercultural competence is associated with nationality, while difference was found between the identity maintenance and class and between the interaction respect and economic status of the students. In this direction, it can be interpreted that education and having been abroad before were not important in terms of intercultural effectiveness, which is similar to the results of previous studies.

Individuals with a high level of multicultural awareness are expected to respect the values, beliefs, and social structures of other cultures. The review of the literature reveals that the level of cultural awareness among nursing students, whilst not particularly high, was above average. [26]. Similarly, in a study conducted with nursing students that assessed their self-efficacy in disaster response, the results indicated that nursing students have low levels of intercultural awareness [27]. In addition, the literature indicates that there is a relationship between intercultural awareness and factors such as nationality, socioeconomic class, age, marital status, and desire to work abroad [28]. In the present study, participants' multicultural awareness were found to be above average, and it was noted that there was a strong correlation between participants' nationalities and their levels of multicultural awareness. In addition to these findings, it was identified that perceived cultural awareness was influenced by the participants' class, their experience of living abroad, and whether they had received transcultural nursing education. Furthermore, this study shows that being abroad before has an impact on cultural communication awareness. It is thought that the difference between the literature and this study is due to the sociodemographic characteristics of the participants.

Multicultural environment, receiving education, and participating in cultural programs, as well as learning about others' feelings and thoughts, enhances intercultural competence [29]. At this point, the concept of intercultural sensitivity requires individuals to have the ability to recognize, understand, and respect different cultures. Similarly to the group in this study, a study conducted with nursing students also found that the students' levels of intercultural sensitivity were moderate [27]. Likewise, another study conducted with nursing students found that their levels of intercultural sensitivity were above average [30]. The literature shows that the participants were more emotionally resilient in intercultural communication when compared to female participants, while women are culturally better empathisers than men [31-33]. In contrast to this study, research conducted by Baksi and colleagues showed that students' economic circumstances influence their levels of intercultural sensitivity [34].

The study conducted by Del Villar found that students' intercultural sensitivity is linked to the number of countries they have visited and that their intercultural sensitivity increases as the length of time they spend abroad increases [35]. According to the review of the literature, conducted by Hergül et al. and Baksi et al., a correlation between women's levels of intercultural sensitivity and their gender was also revealed [34,36]. The present study found that nursing students' levels of intercultural sensitivity were below average and that the participants' nationalities had an effect on their enjoyment of communication and their attentiveness in communication in terms of intercultural sensitivity. In addition, it was identified that respect for cultural differences is linked to participants' economic status and that their enjoyment of communication is influenced by whether or not they have previously lived abroad. It is thought that conducting the research in different societies and cultures plays a role in the emergence of different results.

In similar studies conducted in this field, although the number of local residents from that country is higher than that of other nationalities involved in the research, it is observed that foreign groups are also included in the study [37,38]. While almost the half of the participants in this study were Turkish, the other significant portion consisted of international students. In this study, when examining behavioural flexibility in relation to levels of intercultural effectiveness among African students, it was found to be higher than that of Turkish students. Conversely, it was determined that Turkish students' levels of multicultural awareness were higher than those of African students.

Courses covering intercultural nursing and cultural nursing are offered at universities at varied times, sometimes as electives and sometimes as mandatory courses. In the study conducted by Abbas, most of the students stated that they had received training in this field [26]. It was determined that there are 206 universities affiliated to the Higher Education Institution in Turkey, 58.7% of these universities have nursing departments, and 45.4% of the universities with nursing departments offer culture courses [39]. However, a review of the literature reveals that Topcu and Ayaz et al. noted that the vast majority of students in their studies had never heard of the concept of intercultural nursing [40,41]. In the present study most of the students had knowledge in the field of intercultural nursing and had received education before. Although the intercultural nursing module is taught in the second year at the university where the research was conducted, it was found that final-year students' levels of 'interaction respect' were higher than those of second-year students, and that final-year students' levels of 'cultural communication awareness' and 'perceived cultural awareness' were higher than those of students in other years, indicating that they pay greater attention to communication. It is thought that the reason for these results lies in the fact that, whilst the acquisition of theoretical knowledge through the course is important, students' ability to apply this knowledge in practical settings during placements plays a role in further developing their cultural awareness by the final year.

Studies conducted with nursing students have found that a low percentage of students have previously lived abroad. [34,36]. Pedersen and Vande Berg in their study suggest that only sending students abroad is not enough to produce intercultural competence scores for targeted students [42,43]. In addition, it is stated that the fact that students have been abroad or have lived abroad before is positive on intercultural competence scores [44]. When the literature is examined, it is stated that individuals who live in a foreign country for six months or longer strengthen their ability to be open-minded and to recognise other cultures. On the other hand, it is stated that cultural immersion provides nursing students with the ability to communicate more effectively with different cultures and to be more flexible and understanding the case of cultural diversity [45]. According to the income level of the World Bank, it is observed that the students forming the sample are at the lower-middle and low income level of the countries [46]. For this reason, it is interpreted that students' economic difficulties affect the rate of experiencing other countries. In the present study, only a small amount of the students who attended this study have been to any other foreign country except Cyprus. However, it is thought that the fact that the majority of students do not have experience abroad may have a potentially disadvantageous impact over the results [47]. Moreover, it was found that those who had lived abroad had higher levels of cultural communication awareness, perceived cultural awareness and trust in communication than those who had not travelled abroad. This finding supports the existing literature by demonstrating that spending time abroad enhances cultural competence and awareness.

CONCLUSIONS

As a result of this study, intercultural effectiveness and sensitivity of nursing students were found below average, while multicultural awareness levels were above average. On the other hand, it has been shown that individuals' nationalities influence their levels of intercultural effectiveness and awareness, also students class plays a role in their identity maintenance and received cultural awareness. In particular, it was found that African students have a higher level of cultural awareness and that studying abroad and being in the final year of study have the impact on cultural competence. Another finding identified in this study was that students' experience of living abroad was associated with cultural communication awareness, perceived cultural awareness and confidence in communication. Nursing students, who will become the professional nurses of the future, should be subject to a long-term monitoring process throughout their education to ensure they acquire care skills grounded in cultural competence. These results highlight the need to strengthen culturally competent nursing education through a comprehensive educational approach. Intercultural competence should not only be delivered through compulsory standalone courses but also integrated across the entire nursing curriculum to ensure a consistent cultural perspective in all areas of education. In addition, international

exchange programs and clinical placements abroad should be expanded to improve students' intercultural sensitivity and preparedness for culturally appropriate care in diverse healthcare settings.

Study of limitations

This study has certain limitations. Due to the cross-sectional and correlational nature of the research methodology, the study's inherently quantitative design may not adequately reflect the in-depth perspectives of the participants. On the other hand, the fact that the study was conducted exclusively with university students is another limitation of the prenet study.

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