Original article

Reciprocity in International Student Adaptation: An Example from a Faculty of Education

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Abstract

This study examines the perceptions of pre-service teachers studying at a Turkish university towards international students, their intercultural interaction experiences, and their levels of ethnocentrism. Conducted using a convergent parallel mixed method, the study involved semi-structured interviews with nine pre-service teachers, and the Generalized Ethnocentrism Scale was administered to 165 pre-service teachers. Qualitative data were analyzed thematically using MaxQDA, while quantitative data were analyzed using descriptive and comparative statistics. The findings indicate that pre-service teachers generally have a positive attitude towards cultural diversity and view international students not only as 'foreigners' but also as a source of cultural richness and learning opportunities. Participants emphasized empathy, helpfulness, and inclusiveness in social relationships and stated that initial difficulties arising from language barriers and cultural differences were overcome over time. It was stated that international students contributed academically and socio-culturally to the classroom environment, but that in some cases language inadequacy limited their participation. The average level of ethnocentrism was found to be 2.34, and participants exhibited low levels of ethnocentric tendencies, with no significant difference between genders. Those with low levels of ethnocentrism were found to adopt more open communication and empathy-focused attitudes, while those with medium to high levels tended to be more distant. The results reveal that, in order to develop intercultural sensitivity, it is necessary to focus not only on the adaptation processes of international students but also on the levels of ethnocentrism of local students. The study suggests that teacher training programs should include intercultural competence, that mentoring and social contact opportunities should be increased, that digital interaction opportunities should be evaluated, and that interdisciplinary approaches should be disseminated.

Keywords: Intercultural Sensitivity, Ethnocentrism, Pre-service teacher, Convergent Parallel Pattern, Cultural Interaction in Higher Education

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INTRODUCTION

Throughout history, different societies have come together for various reasons; these unions have paved the way for increased cultural diversity and the formation of multicultural structures. Today, dynamics such as globalisation, technological developments, migration movements and international education enable individuals to interact more frequently and directly with different cultures. This situation not only offers individuals the opportunity to learn about different cultures but also creates the opportunity to share and re-evaluate their own cultural values. In this context, multiculturalism is based on an understanding that recognises and accepts individuals' ethnic, linguistic, religious and social differences, while intercultural sensitivity is considered the ability to establish healthy relationships with these differences, develop empathy and support social harmony.

This type of cultural interaction and sensitivity directly affects the quality of the multicultural campus climate, particularly in higher education institutions. Turkey has experienced a remarkable increase in the number of international students in recent years, due to both its geopolitical position and the internationalisation policies adopted in higher education. According to data from the Council of Higher Education (YÖK), while there were only 16,059 international students in Turkey in the 2005–2006 academic year, this number rose to 87,903 in the 2015–2016 period and to 336,366 as of 2024 (Çalıkoğlu, 2023; Tekin, 2022; YÖK, 2024). This development demonstrates that Turkey's higher education system has become more open and attractive to international students; it also indicates that the country has become an effective global actor in the field of higher education.

A review of the literature on these subject reveals that studies have mainly focused on the experiences of international students in Turkey. These studies frequently highlight the economic, social and cultural difficulties encountered by students, as well as the adaptation problems and lack of interaction experienced during the education process (Abaslı and Akman, 2018; Gebru and Yüksel-Kaptanoğlu, 2020; Nazır and Bulut, 2019; Tengilimoğlu et al., 2021; Özoğlu, et al. 2015). However, it is observed that most current practices are structured from a one-sided perspective, focusing solely on the adaptation of international students (Alan et al., 2023; Karaman, 2020; Tekin and Orhan, 2023; Titrek et al., 2016). The active participation of local students in this process is often neglected, which weakens the ground for cultural interaction based on the principle of reciprocity (Çalıkoğlu, 2023; Yazan, 2022).

However, in order to build a multicultural and inclusive campus life in higher education, interaction and understanding must be strengthened not only at the systemic level but also at the level of interpersonal relationships. At this point, it is crucial to determine the level of intercultural sensitivity among local university students and to understand the factors that influence this sensitivity. This is because the formation of a peaceful, egalitarian and interaction-based structure in university

environments is closely related not only to the integration of international students but also to the level of cultural awareness and empathy among local students.

The aim of this study is to examine the levels of intercultural sensitivity displayed by Turkish university students in their interactions with international students, to reveal the fundamental factors influencing this sensitivity, and to develop recommendations that can contribute to a more inclusive and mutually understanding campus life in higher education based on the findings. Thus, the aim is to present a holistic perspective towards creating a university climate that prioritises not only academic success but also social peace and global citizenship awareness.

Within this scope, answers will be sought to the following sub-questions:

1.   What are pre-service teachers' perceptions of international students?

2. What cultural and communicative challenges or opportunities do pre-service teachers experience in their interactions with international students?

3. What kind of suggestions do pre-service teachers offer for developing intercultural interaction in the university environment?

4. What are the levels of ethnocentrism among pre-service teachers?

5. Do the levels of ethnocentrism among pre-service teachers show significant differences according to gender?

MATERIALS and METHODS

Research Design

The research was structured according to a convergent parallel mixed method design. The fundamental feature of this model is the simultaneous collection and analysis of qualitative and quantitative data and the comparative interpretation of the results (Grand-Guillaume-Perrenoud et al., 2023; Licayan et al., 2021). Convergent parallel mixed methods emphasise giving equal weight to both types of data and conducting a comprehensive evaluation by comparing the findings (Yüksel, 2019).

In this context, thematic findings from qualitative interviews and statistical results from quantitative data were considered together. In particular, it was examined whether quantitative data on the level of ethnocentrism was supported by qualitative findings on cross-cultural interaction, and all data obtained were interpreted using a holistic approach. This methodological approach ensured that the classifications obtained from quantitative data were reinforced by qualitative findings; it contributed to establishing meaningful relationships between data types and increasing the depth of interpretation. Thus, it increases the scope and depth of insights gained from the research by explaining different dimensions of the same phenomenon, strengthening validity and reliability (Grand-Guillaume-Perrenoud et al., 2023; Yüksel, 2019).

The Study Group

The study group for the research was determined to use purposive sampling. During the qualitative data collection process, nine first-year pre-service teachers studying at a state university and interacting with international students in the university environment were included in the study. The participants were selected based on their experience of interacting with different cultures and their ability to provide in-depth data in the context of the research topic.

At this stage, in order to test the generalisability of the themes obtained from the qualitative data and to make statistical evaluations based on a larger sample, the quantitative data collection process was initiated. In the quantitative phase of the research, the Generalised Ethnocentrism Scale (GENE) was administered to 165 pre-service teachers randomly selected from the same university.

Data Collection Tools

Qualitative Data Collection Tool

A semi-structured interview form was used as a qualitative data collection tool in the research. The form was developed by researchers to examine the perception of reciprocity in international student adaptation programmes. The interview questions were structured in line with the conceptual framework in the literature and the purpose of the research, and content validity was ensured in accordance with expert opinions. The interview form included individual perceptions of the concept of international students, experiences with international students, observations of international students in the classroom and campus environment, Turkish students' assessments of their perspective on international students, and suggestions for integration. It also includes suggestions for enhancing integration between Turkish and international students. The interviews were conducted individually with participants selected on a voluntary basis. Audio recordings were made during data collection, and the interviews were later transcribed into written text for inclusion in the analysis process. Each interview lasted approximately 30 minutes.

Quantitative Data Collection Tool

To collect quantitative data within the scope of the research, the Generalised Ethnocentrism Scale (GENE), developed by Neuliep and McCroskey (1997) and adapted into Turkish by Üstün (2011), was used. The scale aims to measure individuals' attachment to their own culture and their tendency to evaluate other cultures. The scale consists of a total of 20 items and uses a 5-point Likert-type rating scale (1 = Strongly disagree, 5 = Strongly agree).

According to the results of the field research, items 4, 7, 9, 12, 15, and 19 are generally considered reverse items in the Turkish adaptation study and other studies (Üstün, 2011). However, in this study, the original version of the scale was accessed, and the item contents were examined in terms of

conceptual integrity. Based on the content analysis, it was determined that items 4, 7, 9, 11, and 14 should be recorded as anti-ethnocentric (reverse) statements. These items reflect positive attitudes towards openness to different cultures, cultural tolerance, and intercultural interaction.

For this reason, the five articles in question were reverse-coded prior to analysis, and the scoring structure of the scale was adjusted to its original meaning. Subsequently, the calculated Cronbach's Alpha value was 0.89, indicating that the scale has a high level of internal consistency. Thus, while remaining faithful to the original structure of the scale, the measurement validity of the data obtained was also preserved.

Data Analysis

In the study, a convergent mixed-methods design was adopted, whereby qualitative and quantitative data were collected simultaneously, analysed independently, and brought together during the integration phase.

Qualitative Data Analysis

In the qualitative dimension of the research, data was collected to gain an in-depth understanding of Turkish university students' perceptions of international students, their communication experiences, and their approaches to intercultural interaction. In this context, the audio recordings of the semi-structured interviews conducted were transcribed into written text and the data was systematically coded. The computer-assisted qualitative data analysis programme MaxQDA 2022 was used in the analysis process.

First, open coding was performed on the interview texts, codes with similar content were grouped together to form meaningful categories, and these categories were grouped under themes. The MaxQDA programme contributed to the systematic execution of the coding process. The coding procedures were carried out independently by the researchers; a cross-checking method was applied to ensure consistency between interpretations. The themes obtained were directly supported by participant statements, thereby strengthening descriptive validity.

Throughout the entire analysis process, scientific research and publication ethics were strictly adhered to; the personal details of the pre-service teachers were kept confidential and participation in the interviews was voluntary. To protect the privacy of the pre-service teachers, they were coded as PST1, PST2, etc.

Quantitative Data Analysis

In the analysis of quantitative data, the normality of the scores obtained from the Generalised Ethnocentrism Scale was first examined. Statistical evaluations revealed a 95% confidence interval of 2.24–2.44. The median value (2.30), being close to the mean, indicates that the distribution is largely

symmetrical. However, the skewness (1.29) and kurtosis (3.51) values reveal that the distribution is positively skewed and leptokurtic. As these values exceed the ±1 limit, the normal distribution assumption is not fully met; however, the deviation can be said to be low.

Due to the assumption not being fully met, the non-parametric Mann–Whitney U test was applied in comparisons related to the gender variable. The scale used is scored between 1 (strongly disagree) and 5 (strongly agree); high scores reflect stronger ethnocentric tendencies, while low scores reflect more inclusive and culturally open attitudes. The 0.80 formula was used to interpret the score ranges. Accordingly;

1.00–1.80 = Very low level

1.81–2.60 = Low level

2.61–3.40 = Medium level

3.41–4.20 = High level

4.21–5.00 = Very high level.

RESULTS

In this section, the findings obtained based on the qualitative and quantitative data of the research are presented under thematic headings. Firstly, qualitative findings based on semi-structured interviews conducted with pre-service teachers are presented; these findings have been structured according to themes identified through content analysis and enriched with direct quotations supported by participant codes (PST1, PST2, ...).

Building on the preliminary impressions revealed by the qualitative findings, the results of the quantitative analysis conducted in the second phase of the research are presented. In this context, general trends are identified based on data obtained from the Generalised Ethnocentrism Scale, and thematic interpretations are supported.

Qualitative Findings

Theme 1. Turkish Students' Perceptions of International Students

Sub-theme / Code	f	%
Cultural richness and learning	9	32,1
Courage and original experience	6	21,4
Overcoming prejudices	6	21,4
Global perspective and personal development	4	14,4
Common human values	3	10.7
Total	**28**	**100**

The majority of participants viewed international students not merely as 'foreign' individuals, but as a natural part of cultural exchange and learning. It was noted that these students bring diversity and dynamism to the university environment, as well as opportunities for mutual learning. Regarding this topic, T1 and T3 expressed their views as follows:

'The term "international student" evokes associations such as diversity, cultural richness, and learning opportunities for me.' (PST1)

'A fortunate student who has taken a special step that not everyone in life can experience...' (PST3)

Participants stated that relationships established with international students could initially create some shyness, but over time these interactions contributed to overcoming prejudices. T8's opinion on this subject is noteworthy:

'I can truly say that I changed my perspective on international students thanks to a friend.' (PST8)

Furthermore, it was emphasised that communication with individuals from different cultural backgrounds fosters not only social but also intellectual development. This process was described as a learning experience that transformed participants' ways of thinking and made them more open-minded individuals.

Theme 2. Social Relationships with International Students and Support Mechanisms

Sub-theme / Code	f	%
Empathy and helpfulness	6	30
Encouraging participation and inclusion	5	25
Awareness of and seeking support against social exclusion	5	25
Genuine relationships and trust	4	20
Total	**20**	100

Prospective teachers have highlighted the importance of social relationships established with international students in the university environment and shared various attitudes and behaviours that support the development of these relationships. It has been observed that Turkish students tend to show empathy, offer assistance, and encourage participation. It was stated that there was a particular sensitivity towards international students experiencing loneliness and that individual efforts were effective in including these students in social environments. The views of PST7 and PST5 on this subject are as follows:

"*I had an international student friend who was looking for a flat to rent in Ankara... I tried to help as much as possible.*" (PST7)

"*I try to create a sincere environment like a landlord.*" (PST5)

The participants' statements show that Turkish students play a supportive role in the social adaptation process of international students. The tendency to help has been effective not only in times of need but also in establishing trust-based and sincere social bonds. This shows that relationships are based on voluntarism and create an environment of mutual trust.

Some participants stated that, in order for international students who are lonely or excluded to be more effectively integrated into social life, support mechanisms are needed not only at an individual level but also at an institutional level. This reveals that students need to be supported not only through personal sensitivity but also through the guidance and direction of university administrations.

Overall, the findings that stand out in this theme are shaped around empathy, helpfulness and social inclusiveness. Participants emphasised that the relationships developed with international students not only serve as friendships but also strengthen cross-cultural understanding.

Theme 3. Communication Barriers and Cross-Cultural Learning Experience

Sub-theme / Code	f	%
Language barriers and initial shyness	5	29,4
Personal development and awareness through cross-cultural interaction	5	29,4
Tendency to gain mutual benefits from the communication process	4	23,5
Misunderstandings arising from cultural differences	3	17,6
Total	**17**	**100**

The majority of participants stated that they experienced various communication barriers during their initial contact with international students. The main barriers were language barriers and shyness stemming from cultural differences. Participants indicated that concerns about foreign language proficiency and misunderstandings of cultural codes caused difficulties in communication. For example, PST7 described this process as follows:

"*I was shy at first because I didn't feel I was that good at foreign languages.*" (PST7)

Similarly, PST1 conveyed that cultural differences can lead to misunderstandings in communication as follows:

"*On the negative side, there can be language barriers, such as misunderstandings of jokes or idioms*." (PST1)

However, some participants viewed this process not as a challenge but as an opportunity for personal development and learning. They emphasised that communication with different cultures increases individual awareness and improves communication skills. PST8's statement, which reflects this perspective, is noteworthy:

"I *think that being in contact with different people, people from different cultures, is a good investment we make in ourselves*." (PST8)

Based on the participants' views, it is understood that communication barriers are not permanent; being open-minded, having an empathetic approach, and repeated interactions remove these barriers over time. This situation shows that intercultural communication is not only a skill but can also be developed with a mental attitude that is open to learning.

Theme 4. The Impact of International Students on the Classroom and Campus Environment

Sub-theme / Code	f	%
Academic contributions	6	33,3
Socio-cultural contributions	5	27,8
Grouping and segregation	4	22,2
Overcoming prejudices over time	3	16,7
Total	**18**	**100**

Prospective teachers stated that international students make significant contributions to the classroom environment, noting that these students enhance academic and cultural diversity by offering different perspectives. In particular, their approach to topics from different perspectives in classroom discussions both enriches the teaching process and contributes to the intellectual development of local students. In this regard, the statement by Prospective Teacher 1 is noteworthy:

"*They contribute to a wider range of views emerging in the classroom and to a broader view of topics with different examples*." (PST1)

Participants also emphasised that the study habits of international students had a positive effect on them. It was stated that attitudes such as the habit of using different sources and making greater use of digital tools increased the academic motivation of Turkish students. Regarding this topic, PST7 stated the following:

"*By incorporating the internet more, they study with different notes from many sources... My notes have been positively affected*." (PST7)

However, alongside these positive contributions, some participants also noted that international students' participation in class can sometimes negatively affect classroom dynamics due to language limitations or communication gaps. This situation can lead to communication breakdowns or passive participation in some courses.

The general conclusion that can be drawn from the participants' views is that international students add value to the university environment both academically and culturally; however, language proficiency and communication skills need to be supported for this contribution to be effective. The

table below presents the frequency and percentage values related to these sub-themes; each sub-theme is then explained with supporting participant statements:

Theme 5. Prejudices and Cultural Acceptance

Sub-theme / Code	f	%
Cultural acceptance and hospitality	5	41,7
Individual and societal prejudices	4	33,3
Differentiation by field	3	25,0
Total	**12**	**100**

In Theme 5, pre-service teachers' approaches to different cultures were evaluated within the framework of an acceptance process shaped by individual experiences. Participants stated that they initially felt a sense of distance in their relationships with international students; however, as these contacts progressed, they transformed into positive interactions. During this transformation process, it was observed that pre-service teachers became more sensitive to cultural differences and questioned their personal prejudices. For example, TA9 described this process as follows: 'I was hesitant at first, but after getting to know them, we had very nice conversations. I can say that I became more open to different cultures,' emphasising that direct communication played a decisive role in changing attitudes.

Similarly, PST7 stated that the joint activities increased intercultural understanding, saying, "*Cultural exchange with international friends was very enjoyable. I think we are a nation open to differences.*" PST2, on the other hand, expressed the positive attitudes they observed in the university environment: "*I think we are generally a hospitable society. Especially on campus, some students try to help them.*" These views show that pre-service teachers support cultural acceptance by relating social values to their individual observations.

However, some participants stated that prejudiced attitudes still exist in their environment. PST3 mentioned that some students were distant towards international students and that they encountered individuals who thought that international students should "*adapt to our culture*" PST6 stated that sometimes people around them behaved with concerns such as "*are they dangerous?*" and that this made them uncomfortable. PST4 stated that the word "*foreigner*" is generally used with a negative connotation in society and that this fosters prejudiced views among students.

These findings show that cultural acceptance develops through interpersonal contact, but that societal prejudices can continue to influence some students. Participants emphasised that direct interaction with different cultures has transformative power, but pointed out that this interaction can vary from person to person. Therefore, while individual contacts have transformative power in terms of cultural acceptance, institutional and societal support mechanisms are also important for this process to become permanent. Qualitative findings reveal that intercultural integration does not develop

spontaneously; it must be supported by social and cultural activities, volunteer-based mentoring programmes, and institutional awareness-raising activities. Participants also emphasised that a sense of belonging can be strengthened not through individual effort, but through a planned and sustainable social structure.

Quantitative Findings

Following the participants' views on intercultural interaction, the quantitative data of the study reveal the trends driving this interaction in a more systematic manner.

Levels of Ethnocentrism

In this context, the statistical findings regarding levels of ethnocentrism are presented in Table 1.

Table 1. Ethnic Centricity Levels of Pre-service teachers

Variable	N	X̄	sd
Female	111	1,32	,51
Male	54	1,52	,57
Total	**165**	**2,34**	**,63**

As shown in Table 1, the overall mean score of the participants regarding their levels of ethnocentrism is 2.34 (SD = 0.63). Considering that the scale is scored on a five-point Likert continuum ranging from 1 (strongly disagree) to 5 (strongly agree), higher scores indicate stronger ethnocentric tendencies, whereas lower scores reflect more inclusive and culturally open attitudes. In this context, the overall mean score falling within the 1.81–2.60 range indicates that the participants generally exhibit a low level of ethnocentrism.

When examined according to the gender variable, the mean score for female participants was 1.32 (SD = 0.51), whereas the mean score for male participants was 1.52 (SD = 0.57). Although both values fall within the low-level range, the mean score for males was higher than that for females. This finding suggests that male participants demonstrate relatively higher ethnocentric tendencies compared to female participants, while female participants display lower levels of ethnocentric attitudes.

In other words, the findings overall indicate that pre-service teachers tend to develop a positive perspective toward different cultures and approach cultural diversity in a more tolerant, open, and interaction-oriented manner.

Tablo 2. Comparison of Ethnocentrism Levels by Gender (Mann–Whitney U Test Results)

Gender	*N*	*Sıra Ortalaması*	*U*	*z*	*P*
Female	111	79,37	2594,000	-1,400	,161
Male	54	90,46			
Total	**165**				

Table 2 shows the results of the Mann-Whitney U test applied to determine whether participants' ethnocentrism scores showed a significant difference based on the gender variable. In this non-

parametric analysis, which was preferred due to the non-fulfilment of the normal distribution assumption, the median scores of female (n = 111) and male (n = 54) participants were found to be 79.37 and 90.46, respectively.

According to the test results obtained, Mann-Whitney U = 2594.00, Z = -1.400, and p = .161. Since the obtained p-value is greater than .05, it was concluded that there is no statistically significant difference in ethnocentrism scores between the groups based on the gender variable. This finding indicates that the levels of ethnocentrism among female and male participants are similar.

DISCUSSION

This research has examined, in a multidimensional manner, the attitudes of pre-service teachers studying at Turkish universities towards different cultures, particularly international students, their intercultural interaction experiences, and their levels of ethnocentrism. The findings reveal that pre-service teachers generally exhibit a positive approach to cultural diversity; however, this approach varies significantly depending on variables such as individual experience, level of social contact, and academic context.

The fact that participants in many cases evaluated international students not only by their 'foreign' identity but also as part of cultural sharing and interaction indicates a move away from ethnocentrism and towards the development of multicultural awareness. This situation coincides with the role of 'cultural mediator' defined in Byram's (1997) intercultural competence model. The research data shows that students do not view their own culture as absolutely correct but rather evaluate it by comparing it with the different cultural perspectives they encounter. This suggests that the attitudes of openness, respect, and empathy included in Deardorff's (2006) model are beginning to develop, and that, as a result, ethnocentric tendencies are weakening.

However, intercultural interaction processes do not always proceed smoothly. Factors such as shyness, communication anxiety, misunderstandings, and social distance, especially during initial encounters, can limit participants' ability to interact. This situation can be explained by Gudykunst's (1995) 'Uncertainty Reduction Theory.' Many participants stated that they were cautious at first due to language barriers and differences in social norms; however, they indicated that these uncertainties diminished over time, and they were able to communicate more comfortably. This process contributes not only to social adaptation but also to the individual questioning their own perceptions of cultural superiority (Chen & Starosta, 2000).

The resulting transformation supports the prejudice-reducing effect of voluntary and equal-status contact between different groups, as proposed in Allport's (1962) 'Contact Hypothesis'. Some participants indicated that they initially approached international students with reserve, but that these prejudices diminished through direct contact. This finding demonstrates that the level of ethnocentrism

is not a fixed personality trait but a flexible structure that can change with social contact (Bilgiç, 2019; Smith & Silva, 2011).

The findings also show that demographic variables such as gender and academic discipline have certain effects on cultural openness. Female participants reported higher levels of empathy and emotional awareness, while male participants focused more on individual development and academic achievement. These differences are related to the 'emotional approach differences' highlighted in Ting-Toomey and Dorjee's (2018) model of gender and intercultural communication. Furthermore, students studying in the social sciences and education faculties indicated that they were more open to issues such as cultural sensitivity and social adaptation, while engineering and science students were observed to have more limited interaction. The emerging picture can be explained by Becher and Trowler's (2001) concept of 'disciplinary culture'.

The quantitative findings of the research also correspond with the qualitative trends. The fact that participants' levels of ethnocentrism are below average indicates that they have developed generally tolerant, open, and inclusive attitudes towards different cultures. Such a trend is also related to the increasing waves of migration towards Turkey and the internationalisation process in higher education. As emphasised in Migration Wave studies, pre-service teachers' experiences in multicultural environments and their increasing awareness of cultural diversity facilitate the adoption of inclusive pedagogical approaches (Aydın Güngör & Çakır, 2021; Aydın, et al., 2019; Yıldız, et al., 2023).

Therefore, the cultural openness developed by pre-service teachers becomes more visible with migration movements and the participation of international students in the education system. In particular, the integration of Syrian refugees and other foreign students into the Turkish education system has directly influenced pre-service teachers' gains in cultural sensitivity. As Emiroğlu İlvan and colleagues (2023) also point out, pre-service teachers' curriculum preferences are shaped by a multicultural perspective and ethnocultural empathy. However, it is noteworthy that this transformation does not occur in the same way in every individual. Ethnocentric tendencies persist among pre-service teachers who have limited contact with different cultural backgrounds or who lack adequate pedagogical training in multicultural education (Aydın et al., 2019; Çalışkan Sarı et al., 2021). This situation highlights the need for more systematic, planned, and inclusive interventions in teacher education programmes aimed at developing cultural competence. Otherwise, positive attitudes towards cultural diversity will remain limited to certain student groups, and it will be difficult for multicultural education policies to have the desired impact.

Similarly, the increased uncertainty surrounding the COVID-19 pandemic has reinforced nationalist reflexes and, consequently, ethnocentric tendencies among some pre-service teachers (Boulouta & Manika, 2021; Zhou et al., 2023). The 'rally around the flag' effect and behaviours that favour local resources can increase the emphasis on national identity, particularly during times of crisis,

thereby creating distance from external groups (Köck et al., 2023; Marinković et al., 2023). However, online learning processes have created new areas of interaction regarding cultural diversity, paving the way for a positive increase in the cultural awareness levels of some candidates (Sepulveda-Escobar & Morrison, 2020; Yoon et al., 2021). The observed increase in cultural sensitivity and empathy in the post-pandemic period has also influenced pre-service teachers' pedagogical approaches (Aydoğan & İzmir, 2024).

All these findings show that pre-service teachers' levels of ethnocentrism are not fixed or unidirectional; on the contrary, they are a structure that is shaped and transformed by social contact, pedagogical guidance, cultural awareness, and individual experiences. Increasing opportunities for intercultural interaction in universities, developing volunteer-based mentoring programmes, and promoting teaching environments that embrace cultural diversity will not only enhance the integration of international students but also strengthen the cultural openness of Turkish students (Glass, Gómez & Urzua, 2014; UNESCO, 2013). Thus, in universities, cultural integration based on reciprocity will be possible not only spatially but also mentally.

CONCLUSION

Attitudes of Prospective Teachers Towards International Students and Cultural Diversity

This study examined prospective teachers' attitudes towards international students and different cultures from a multidimensional perspective. The findings show that teacher candidates generally have a positive attitude toward cultural diversity; they embrace values such as empathy, openness, and tolerance, and prejudices weaken with social contact. It was observed that teacher candidates evaluate international students not only through their "foreign" identity but also as a natural part of cultural interaction and learning processes.

Challenges and Opportunities in Cross-Cultural Interaction Processes

The research results also reveal that cross-cultural interaction does not always proceed smoothly. It has been determined that shyness, communication anxiety, and language-based difficulties are experienced, especially during initial contacts, and that this situation limits interaction in some teacher candidates. However, it has been observed that these difficulties decrease over time through repeated social contacts and mutual interactions, and that interaction offers important opportunities in terms of personal development and cultural awareness.

Implications for Developing Intercultural Interaction in the University Environment

The experiences of teacher candidates show that intercultural interaction should not be limited to individual efforts. Volunteer-based mentoring practices, course content that supports multicultural pedagogy, and social activities should be used to ensure that students have more in-depth experiences

with cultural diversity. Such structured practices will strengthen both the adaptation processes of international students and the cultural sensitivity of local students.

General Findings Regarding Prospective Teachers' Levels of Ethnocentrism

The quantitative findings of the study reveal that teacher candidates' levels of ethnocentrism are generally low. This indicates that teacher candidates have developed more inclusive, culturally open, and tolerant attitudes. The results show that levels of ethnocentrism are not a fixed personality trait; rather, they are a flexible construct that can be changed through social contact, cultural awareness, and educational guidance.

Levels of Ethnocentrism in the Context of the Gender Variable

Analyses based on the gender variable show that there is no statistically significant difference in the levels of ethnocentrism among teacher candidates. The fact that female and male teacher candidates exhibit similar levels of ethnocentric tendencies indicates that cultural openness and tolerance can develop independently of gender.

In conclusion, this study highlights the dynamic nature of the relationship between cultural openness and ethnocentrism and provides important insights for strengthening an inclusive and reciprocal climate in higher education. Increasing opportunities for intercultural interaction in university settings will contribute to enabling not only spatial but also mental and pedagogical integration in the education system.

RECOMMENDATIONS

1. *Teacher Training Programmes Should Include Cross-Cultural Competence:*

    - Cultural diversity, multicultural education and ethnocentrism should be systematically included in education faculties to increase pre-service teachers' cross-cultural awareness.

    - Practical teaching activities should be designed within the framework of intercultural competence models such as those proposed by Byram (1997) and Deardorff (2006).

2. *Social Contact Opportunities and Mentoring Programmes Should Be Developed:*

    - Mutual contact between Turkish and international students should be supported through volunteer-based mentoring programmes, joint projects, and cultural interaction clubs.

    - These practices should be structured to provide the conditions of equal status and shared goals required by Allport's (1954) contact hypothesis.

3. *Online Environments Should Be Used More Effectively for Cross-Cultural Interaction:*

- Digital learning environments, which have developed in the post-pandemic period, should be enriched with materials that reflect cultural diversity and support cross-cultural cooperation.

- Case studies, cultural narratives and video-based dialogues included in digital content should be planned in a way that increases cultural empathy.

4. *Interdisciplinary Approaches and Academic Awareness Should Be Strengthened:*

- Pre-service teachers studying in fields such as engineering and science should also be introduced to the multicultural education context to promote cultural openness skills.

- The cultural perspective of the social sciences should be integrated into other fields to balance disciplinary cultural differences.

5. *The Pedagogical Reflections of Crisis Periods Should Be Addressed:*

- Nationalist tendencies and levels of ethnocentrism triggered in individuals by global crises such as pandemics should be addressed pedagogically, and guidance services should be provided to transform these reflexes.

- Awareness campaigns should be conducted at universities to ensure that collective defence mechanisms such as 'rallying around the flag' do not harm cultural diversity.

6. *Harmonisation Strategies Should Be Developed at the Policy and Institutional Levels:*

- Higher education institutions should develop institutional policies that ensure the active participation of not only international students but also local students in intercultural development processes.

- As recommended by UNESCO (2013), an understanding of cultural integration based on reciprocity should be adopted in educational environments.

Additional Declaration

Author Contributions

The theoretical framework of the study was developed by the first author, the data collection and analysis process was conducted by the second author, the article was co-authored by both authors, and the final version was jointly approved. The contribution ratios are 50% for the first author and 50% for the second author.

Funding

This study was not funded by any institution or organization.

Responsible Artificial Intelligence Statement

In this study, the OpenAI GBT-4 version was used to provide references for current relevant sources in the literature review. As authors, we take full responsibility for any issues that may arise from content generated by artificial intelligence.

Conflicts of Interest

The authors declare that there are no conflicts of interest related to the publication of this study.

Ethics Approval

This study has been conducted in accordance with the principles of Pen Academic Publishing Research Ethics Policy.

The study was approved by the Ethics Committee of Gazi University on 17.05.2025 with the date.

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