



RESEARCH ARTICLE

Adaptation of the Multicultural Competence Perceptions Scale to the Culture of Kosovo

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ARTICLE INFO	ABSTRACT
Received: Sep 19, 2024 Accepted: Nov 26, 2024	This study aimed to adapt the Multicultural Competence Perceptions Scale to the cultural context of Kosovo. Conducted with a sample of 319 participants, the scale was translated into Albanian by expert translators, ensuring linguistic equivalence. Both the Turkish and Albanian versions were evaluated by teachers proficient in these languages, confirming the consistency of the items' meanings. The reliability analysis based on the four-factor structure of the scale showed that factor loadings were statistically significant ($p < .001$), with most values above 0.30, indicating adequate representation of the factors.
Keywords Multicultural Competence, Scale Adaptation Kosovo Teacher Training Cultural Diversity	
*Corresponding Author: serdan.kervan@uni-prizren.com	Confirmatory Factor Analysis (CFA) results demonstrated good model fit indices, confirming the scale's four-factor structure. Some differences in factor structures across cultures were attributed to cultural and linguistic variations. While Kosovar culture shares some similarities with Turkish culture, the use of Turkish and Albanian as teaching languages contributed to the stability of the scale's factor structure.
	The study emphasizes the importance of considering cultural and linguistic contexts in scale adaptation studies. It suggests that the scale can be effectively used in both pre-service and in-service teacher training in Kosovo. Enhancing multicultural competencies among educators is deemed essential for managing cultural diversity effectively. The scale also holds potential for use in broader academic and field research, contributing to diverse findings across various contexts.

INTRODUCTION

Quality teaching becomes more effective when the knowledge imparted to students is presented through a multicultural perspective. Teaching that considers cultural diversity and helps students improve both the quality and quantity of their learning can be described as quality teaching (Ramsden, 2003). Multicultural teaching approaches used by teachers, which enable students from diverse cultural backgrounds to achieve desired and expected learning outcomes, are among the most fundamental elements of this process (Kervan, S., et al., 2022). The concept of multiculturalism refers to social structures where ethnic, linguistic, religious, and other cultural differences coexist. This concept allows individuals to preserve their cultural identities while promoting understanding and cooperation among people from diverse cultural backgrounds. Multiculturalism focuses on accepting diversity, viewing differences as richness, and embracing tolerance (Yıldırım & Açıklan, 2023).

The concept of competence, on the other hand, refers to an individual's knowledge, skills, and abilities in a specific area. It helps us evaluate how successful individuals are in a given field and whether they

possess the necessary knowledge and skills required for it. Competence emphasizes the processes of developing individual abilities, managing learning processes, and acquiring the competencies needed in various cultural contexts (Diken & Ablak, 2024). Understanding the interaction between multiculturalism and competence is essential for comprehending how individuals from diverse cultural backgrounds and experiences shape their perceptions of competence. This interaction can influence how individuals perceive their efficacy in multicultural environments. While multiculturalism emphasizes interaction and appreciation between different cultures, competence reflects individuals' confidence in their skills and knowledge. Therefore, exploring the interplay between multiculturalism and competence provides insight into how individuals perceive themselves and others and how they navigate such environments (Kızıl, V. (2024). Additionally, the impact of cultural factors on competence perceptions is a significant aspect of this interaction. Multiculturalism and competence together help us understand how individuals manage cultural diversity and achieve success in such settings (Atalay, 2024). Banks (1991; as cited in Taylor and Quintana, 2003) conceptualized multicultural teacher competencies at three levels: personal, classroom, and institutional/school levels.

At the **personal level**, it is important for teachers to understand their own cultural identities and the history behind them. At the **classroom level**, teachers are expected not to perceive minority students as "others," to create an environment where all cultures are respected, and to employ culturally responsive teaching methods. At the **institutional/school level**, skills such as developing a philosophy inclusive of multiculturalism, establishing accountability standards for educators, and providing administrative support for multicultural education policies are emphasized.

Multicultural teacher competencies have been addressed from various perspectives by different theorists, highlighting their multi-faceted nature. One prominent approach, the "Multicultural and Academic Competencies for Teachers" model, emphasizes the importance of teachers possessing three key competencies: Self-awareness, Understanding others' cultures, and Academic-multicultural competencies (Egan, M. L., & Bendick Jr, M. (2008)). Similarly, Gay (2000; as cited in Gay, 2002) identifies three main dimensions of multicultural competencies for teachers: Awareness of one's own cultural identity and biases, Openness to learning about the worldviews of different cultural groups, and Development of culturally responsive teaching methods. Culturally responsive teaching practices prioritize effective instructional approaches that support students' cultural characteristics, experiences, and learning processes. These methods aim to create an inclusive and supportive educational environment that bridges the gap between students' cultural backgrounds and academic success.

Among the common characteristics of all studies, the following stand out: recognizing individual differences as enriching elements in the educational process, emphasizing the importance of multicultural education, and adopting pedagogical approaches that support cultural diversity. The research highlights the necessity for teachers to be sensitive to cultural diversity and to consider the diverse cultural backgrounds of students in the learning process. Moreover, it underscores the importance of teachers recognizing their own biases and positively reflecting cultural diversity in the classroom. It is emphasized that significant steps should be taken toward creating equal opportunities in education, ensuring the participation of all students, and developing multicultural education policies. These elements contribute to fostering an environment that promotes equality in education, embraces cultural diversity, and supports every student.

Taking all these characteristics into account, Kosovo, where the study was conducted, embodies a way of life in which differences of every kin such as race, language, and religion flourish in a multicultural context (Çomak, 2009). Additionally, the region exhibits cultural and religious interaction and transformation more intensely than in many other parts of the world. For this reason, this study was undertaken with the belief that examining teachers' perceptions of competence in

multicultural education in Kosovo and adapting a related scale would be beneficial. The findings of this research are expected to contribute not only to the solid foundation of the newly established Republic of Kosovo but also to the prevention of violations of social and cultural rights (Kervan, 2017).

The integration of multiculturalism and competence concepts helps us understand how individuals demonstrate competence in different cultural contexts, how they develop these competencies, and how they interact in multicultural environments (Alğan Gürses, 2021). Examining teachers' perceptions of multicultural competence is crucial for the education system and the professional development of teachers. This study aims to understand and identify the competencies necessary for teachers to work effectively with students from diverse cultural backgrounds. Additionally, it seeks to help teachers recognize their own biases and develop awareness about how to be more effective in a multicultural classroom environment (Özbilen et al., 2020; Aydın et al., 2024).

This research provides a significant opportunity to address the topic of multiculturalism in Kosovo's education system and to understand teachers' perceptions of competence in this area. It also sheds light on the impact of cultural diversity within the educational system. The presence of students from different cultural backgrounds necessitates adjustments in teachers' pedagogical approaches and instructional strategies. Teachers must possess knowledge and skills in areas such as cultural sensitivity, multilingual education, and the use of multicultural teaching materials to provide an appropriate learning environment for all students (Akpınar & Cantürk, 2021; Suna, 2024). Ensuring the validity of scales across different cultures is essential for their effective application (Tezci, 2017). Accordingly, this study aims to adapt the Multicultural Competence Perceptions Scale, developed by Alper Başbay and D. Yelda Kağnıcı (2011), to the cultural context of Kosovo.

The question, "Does the scale developed by Başbay and Kağnıcı (2011) for Turkish culture produce similarly valid and reliable results in the context of Kosovan culture?" is at the core of this research. Adapting the scale to the Kosovan cultural context will contribute to the usability of the Turkish version of the scale in countries with diverse cultural structures. The absence of a prior scale adaptation specifically designed to measure teachers' perceptions of competence in multicultural education in Kosovo highlights the significance of this study. It provides an opportunity to obtain unique data and insights tailored to Kosovo. Furthermore, the study will serve as a valuable resource for developing educational policies and teacher training processes within the framework of multicultural competencies. Ultimately, it will add value to the advancement of multicultural education in Kosovo.

The scale consists of 41 items structured on a 5-point Likert scale and is divided into three factors: Awareness, Knowledge, and Skill. Kosovo is a country where various cultures coexist (Koro, 2008; Yıldırım, 2016). In addition to the Albanian, Serbian, Bosniak, and Turkish populations, citizens from ethnic groups such as Ashkali and Gorani also reside in the country. As official languages, Albanian, Serbian, Bosnian, and Turkish are widely spoken, depending on the population density in different regions. Similarly, schools offer instruction in Albanian, Turkish, and Bosnian as teaching languages based on the local population's demographics (Yıldırım 2012). Considering this multilingual environment, the scale used in this study was administered in both Albanian and Turkish.

METHOD

A mixed-method research design was employed in the adaptation process to comprehensively validate the Multicultural Competence Perceptions Scale in the context of Kosovo. The qualitative phase focused on language validation through a systematic translation process. This process involved forward translation, synthesis of the translations, back-translation, and expert panel review by two bilingual experts to ensure conceptual and cultural equivalence between the original and adapted versions (Beaton et al., 2000).

The quantitative phase addressed the psychometric properties of the adapted scale. This phase involved conducting a pilot test with a small sample to perform an initial item analysis, followed by a larger-scale implementation using stratified random sampling from educational institutions in Kosovo. Psychometric evaluation included confirmatory factor analysis to verify the scale's structure, internal consistency assessment, and construct validity examination (Williams et al., 2010). This methodological approach integrated established cross-cultural adaptation procedures to ensure both linguistic accuracy and measurement validity of the adapted instrument, while accounting for the unique cultural context of Kosovo.

Data Analysis

The data analysis process of the study was carried out in five stages: Language Equivalence, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Reliability Calculation, and Evaluation of Scale Results. In the language validity study, the translation from Turkish to Albanian followed the steps recommended by Beaton et al. (2000). The cultural compatibility of the scale was assessed by two experts holding doctoral degrees in education sciences. A pilot study was conducted with a group of 20 participants, who were not part of the main study but shared similar characteristics, to test the clarity of the items. After necessary revisions, the main study was conducted.

Data from the main study were examined, and missing data were cleaned. In the first stage, considering the relationships between factors, Exploratory Factor Analysis (EFA) was performed using the principal axis factoring method and oblimin rotation technique (Thompson, 2004; Yong & Pearce, 2013). Based on the EFA results, Confirmatory Factor Analysis (CFA) was conducted to verify the factor structure of the scale (Brown, 2015; Kline, 2016). The CFA results indicated that the factor structure of the scale was acceptable in terms of fit indices. The scale's structural properties were evaluated by examining factor loadings, inter-factor covariances, and model fit indices. The model fit indices used were CFI, TLI, RMSEA, and SRMR, with values above 0.90 for CFI and TLI, and values below 0.08 for RMSEA and SRMR considered acceptable (Hu & Bentler, 1999; Kline, 2016). To determine the reliability of the scale, Cronbach's alpha and McDonald's omega coefficients were calculated. All analyses were conducted using Jamovi statistical software (www.jamovi.org).

FINDINGS

Exploratory Factor Analysis (EFA)

The suitability of the data for factor analysis was assessed using the KMO and Bartlett's tests. The overall KMO value was 0.767, with individual values ranging from 0.511 to 0.902, indicating sample adequacy. The Bartlett's Test of Sphericity ($\chi^2 = 3046$, $df = 820$, $p < .001$) confirmed the appropriateness of the data for factor analysis. Parallel analysis revealed six factors, but the initial analysis indicated that many items had low factor values and were grouped under 8 factors.

Subsequently, the analysis was re-conducted using principal axis factoring with oblimin rotation due to the interrelated factor structures. Following the rotation, items with factor loadings below the 0.3 critical value were removed, and the analysis was repeated. In the final results, the KMO value was 0.765, with Bartlett's Test of Sphericity yielding $\chi^2 = 875$, $df = 153$, $p < .001$. Based on the parallel analysis, a four-factor structure emerged (Figure 1).

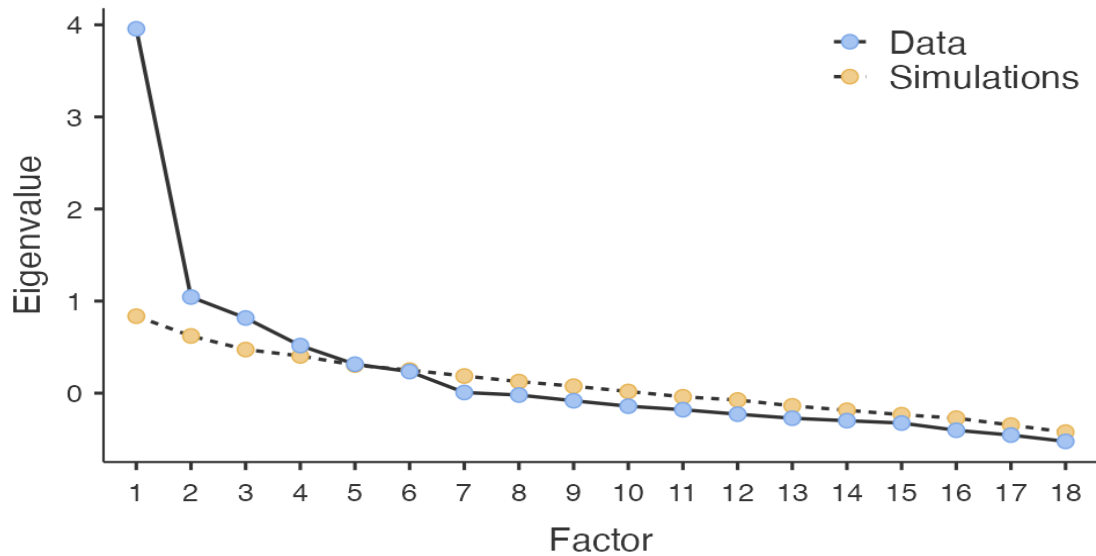


Figure 1: Scree Plot Graph

Table 1: Factor Loadings for the Scale in EFA (Exploratory Factor Analysis)

Items	1	2	3	4	Uniqueness
s20	0.829				0.328
s21	0.734				0.419
s15	0.71				0.479
s23	0.546				0.55
s26	0.433				0.727
s12	0.334				0.691
s7		0.733			0.31
s3		0.722			0.547
s25		0.507			0.675
s30		0.374			0.773
s18		0.367			0.537
s36			0.664		0.553
s37			0.539		0.703
s39			0.486		0.704
s32			0.448		0.751
s1				0.71	0.487
s34				0.389	0.754
s24				0.359	0.789
Total Load	2.81	1.95	1.31	1.15	
Explained Variance	15.61	10.81	7.28	6.41	
Total Variance	15.6	26.4	33.7	40.1	

Exploratory Factor Analysis Results

As a result of the exploratory factor analysis, it was determined that the scale demonstrated a 4-factor structure. When the factor loadings were examined, the values for the first factor ranged from 0.433 to 0.829, for the second factor from 0.367 to 0.733, for the third factor from 0.486 to 0.664, and for the fourth factor from 0.359 to 0.710. The total explained variance of the scale is 40.1%, with the variance explained by each factor being 15.61%, 10.81%, 7.28%, and 6.41%, respectively. The

uniqueness values range from 0.310 to 0.789. The fact that each factor consists of at least three items and the factor loadings are generally above 0.30 indicates that the scale's structure is at an acceptable level. Factor 1 consists of 6 items (s20, s21, s15, s23, s26, s12), and after examining the items related to this factor, it was named "Cultural Awareness and Acceptance." The items in this factor reflect the tendency to recognize, understand, and accept different cultures. Factor 2 consists of 5 items (s7, s3, s25, s30, s18), and after examining the items, it was named "Cultural Pedagogical Competence." This factor includes the teaching skills and practices of teachers in a multicultural educational environment. Factor 3 consists of 4 items (s36, s37, s39, s32), and after reviewing the items, it was named "Cultural Knowledge Level." This factor reflects the teachers' knowledge and understanding of different cultures. Factor 4 consists of 3 items (s1, s34, s24), and after examining the items, it was named "Intercultural Communication." This factor demonstrates the competence in interacting and communicating with different cultures.

Confirmatory Factor Analysis (CFA)

Table 2. Model Fit Indices

Indis	CrITER	First Model	Last Model
χ^2 / df	< 3	217 / 129 \approx 1.68	199 / 126 \approx 1.58
CFI	> .90	0.906	0.922
TLI	> .90	0.888	0.905
SRMR	< .08	0.0533	0.0515
RMSEA	< .08	0.0571	0.0525
RMSEA %90 CI		0.0436 - 0.0701	0.0382 - 0.066

In the Confirmatory Factor Analysis (CFA) conducted to test the construct validity of the Multicultural Competence Perception Scale, it was observed that some of the fit indices (TLI=0.888) in the initial model were below the acceptable level. Therefore, the model was revised based on the modifications suggested by the software (Figure 2). In the final model, the chi-square/degrees of freedom ratio ($\chi^2/df=1.58$), Comparative Fit Index (CFI=0.922), Tucker-Lewis Index (TLI=0.905), Standardized Root Mean Square Residual (SRMR=0.0515), and Root Mean Square Error of Approximation (RMSEA=0.0525, 90% confidence interval: 0.0382-0.066) values were all found to meet the acceptable fit criteria. Compared to the initial model, an improvement in all the fit indices was observed in the final model, and the obtained values indicate that the four-factor structure of the scale has been confirmed.

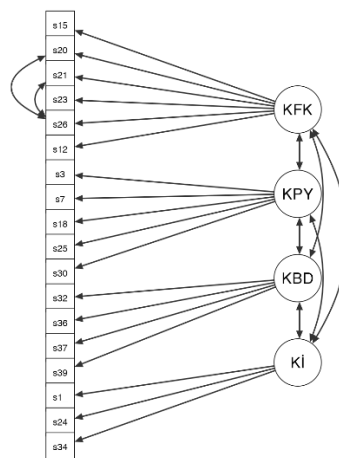


Figure 2. CFA Path Diagram

Table 3. CFA Factor Loadings

Factor	Item	Load	SH	Z	p
CAA (KFK)	s15	0.467	0.0468	9.96	<.001
	s20	0.473	0.0402	11.78	<.001
	s21	0.433	0.0459	9.43	<.001
	s23	0.504	0.0422	11.93	<.001
	s26	0.51	0.0648	7.87	<.001
	s12_r	0.199	0.0463	4.29	<.001
CPC (KPY)	s3	0.408	0.057	7.15	<.001
	s7	0.536	0.0501	10.7	<.001
	s18	0.51	0.0462	11.03	<.001
	s25	0.384	0.0507	7.56	<.001
	s30	0.31	0.0596	5.21	<.001
CKL (KBD)	s32	0.432	0.0529	8.16	<.001
	s36	0.522	0.0544	9.6	<.001
	s37	0.254	0.0462	5.49	<.001
	s39	0.339	0.0478	7.09	<.001
IC (KI)	s1_r	0.256	0.0433	5.91	<.001
	s24	0.4	0.0656	6.09	<.001
	s34_r	0.3	0.0538	5.59	<.001

According to the results of the Confirmatory Factor Analysis, the factor loadings of the items in the scale's four-factor structure were examined. In the **Cultural Awareness and Acceptance (CAA)** dimension, the factor loadings range from 0.199 to 0.510; in the **Cultural Pedagogical Competence (CPC)** dimension, from 0.310 to 0.536; in the **Cultural Knowledge Level (CKL)** dimension, from 0.254 to 0.522; and in the **Intercultural Communication (IC)** dimension, from 0.256 to 0.400. All item factor loadings were found to be statistically significant ($p < .001$). The highest factor loading was found in the CPC dimension for the item "I encourage my students to give examples from their own cultures during class" (0.536), while the lowest factor loading was in the CAA dimension for the item "I find it strange when individuals have different beliefs" (0.199). Standard errors ranged from 0.0402 to 0.0656, and the Z-values ranged from 4.29 to 11.93. Generally, most of the factor loadings being above 0.30 indicates that the items sufficiently represent their respective factors; however, some items (s12_r, s37, s1_r, s34_r) have relatively low factor loadings, which is noteworthy. These items were not removed from the scale as they are theoretically related to the factors.

Reliability

Table 4. Cronbach and McDonald values

Factor	Cronbach's α	McDonald's ω
Cultural Awareness and Acceptance (CAA)	0.787	0.802
Cultural Pedagogical Competence (CPC)	0.717	0.733
Cultural Knowledge Level (CKL)	0.624	0.687
Intercultural Communication (IC)	0.619	0.661

The reliability analysis results of the scale showed that for the **Cultural Awareness and Acceptance (CAA)** dimension, the Cronbach alpha coefficient is 0.787 and McDonald's omega coefficient is 0.802; for the **Cultural Pedagogical Competence (CPC)** dimension, Cronbach alpha is 0.717 and McDonald's omega is 0.733; for the **Cultural Knowledge Level (CKL)** dimension, Cronbach alpha is 0.624 and McDonald's omega is 0.687; and for the **Intercultural Communication (IC)** dimension, Cronbach alpha is 0.619 and McDonald's omega is 0.661. It is observed that the McDonald's omega values are higher than the Cronbach alpha values for all dimensions. The reliability coefficients for

the KFA and CPC dimensions are above the acceptable level, while the reliability coefficients for the CKL and IC dimensions are relatively lower but still close to the acceptable threshold. These results indicate that the scale's internal consistency reliability is generally at an adequate level.

CONCLUSION AND DISCUSSION

The aim of this study is to adapt the Multicultural Competence Perceptions Scale to the Kosovo culture. The scale was initially translated into Albanian, ensuring linguistic equivalence. No changes were made to the languages. When the scale is applied in a different culture and language, if linguistic equivalence is not ensured, it is clear that issues may arise in the fit indices and model fit obtained from the CFA results. Stes, De Mayer, and van Petegem (2010) highlighted the problems caused by linguistic and cultural differences in scale adaptation studies. Therefore, linguistic equivalence was considered essential to minimize issues arising from linguistic problems (Kervan, 2017).

In this study, it is stated that the scale, which was intended to be adapted from Turkish to Albanian, was translated by expert translators, and then both the Turkish and Albanian versions were applied to 10 teachers who teach in these languages. As a result of this application, it was determined that the meanings of the scale items were the same in both languages from a linguistic perspective. When examining the results of the reliability analysis based on the scale's four-factor structure, the factor loadings in the Cultural Awareness and Acceptance (CAA) sub-dimension ranged from 0.199 to 0.510, the factor loadings in the Cultural Pedagogical Competence (CPC) sub-dimension ranged from 0.310 to 0.536, in the Cultural Knowledge Level (CKL) sub-dimension from 0.254 to 0.522, and in the Intercultural Communication (IC) sub-dimension from 0.256 to 0.400. All the factor loadings of the items were found to be statistically significant ($p < .001$). The highest factor loading was observed in the CPC dimension for the item "I encourage my students to give examples from their own cultures in class" (s7) with a factor loading of 0.536, and the lowest factor loading was observed in the CAA dimension for the item "I find it strange that individuals have different beliefs" (s12) with a factor loading of 0.199. Overall, the fact that most of the factor loadings were above 0.30 indicates that the items sufficiently represent the relevant factors. However, it is noteworthy that some items (s12_r, s37, s1_r, s34_r) have relatively low factor loadings. These items were not removed from the scale because they are theoretically related to the factors. In a study by Başbay and Kağıncı (2011), it was found that the scale had three sub-dimensions: Cultural Awareness, Cultural Knowledge Level, and Competence (skills). In addition to these, the sub-dimension of Intercultural Communication was also added. This shows that the application of the scale to different cultures may yield different sub-dimensions. In some intercultural scale studies by Tezci (2017), different structures emerged in some cultures, while similar structures emerged in other intercultural studies (Kervan, 2017). Generally, this highlights the importance of considering cultural differences in scale development and adaptation studies. The results of the Confirmatory Factor Analysis (CFA) indicate that the chi-square/degrees of freedom ratio ($\chi^2/df = 1.58$), Comparative Fit Index (CFI = 0.922), Tucker-Lewis Index (TLI = 0.905), Standardized Root Mean Square Residual (SRMR = 0.0515), and Root Mean Square Error of Approximation (RMSEA = 0.0525) all meet acceptable fit criteria. Improvements were observed in all fit indices, and the obtained values demonstrate that the four-factor structure of the scale has been confirmed. The fact that some of the fit indices achieved excellent levels can be attributed to the sample coming from a different culture (Kervan, 2017). The factor structure in the adaptation study conducted in Kosovo does not match the factor structure in the original study, which suggests that differences in factor structures in studies conducted across cultures may stem from cultural differences. Stes et al. (2010) and Meyer and Eley (2006) examined the effects of language differences on the scale's factor structures. Beaton et al. (2000) discussed different approaches to scale adaptation in intercultural studies and highlighted the importance of adaptation for studies conducted in different linguistic and cultural countries. Although Kosovar culture shares some characteristics with Turkish culture, it is significant that the teaching languages of the

participating teachers were Turkish and Albanian, as this ensured the stability of the factor structures in the fit indices and sub-dimensions.

Tezci (2017) emphasized that scales collecting data from teachers working in different disciplines may yield different results in different measurements and times due to cultural and linguistic differences. Therefore, it is important to consider factors such as the teachers' place of residence, the culture they belong to, the institution they work at, the type of education they have received, and school policies related to their field of education. This suggests that the scale, in its current form, can be used in both pre-service and in-service training in Kosovo.

Multicultural competence perceptions are among the key issues emphasized in Kosovo. Different cultures living together not only create cultural richness, but for this diversity to be effectively managed, it is crucial that education practitioners possess multicultural competencies. In this regard, it is recommended to develop perceptions of competence towards different ethnic groups. Additionally, it is emphasized that imparting such education to university-aged youth plays a critical role.

In this context, it is expected that university faculty members will first become well-equipped in multicultural education (Başbay and Kağınçı, 2011). It is anticipated that the scale can be used effectively not only in academic research conducted with faculty members but also in comprehensive studies involving teachers actively working in the field. This will allow the scale to have a broad application area, contributing to the diversity and richness of findings obtained in different contexts. It is suggested that such studies be carried out by increasing the number of teachers involved.

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