

International Mindedness and Intercultural Competence of the Pre-Service Teachers in Public Universities of Sindh, Pakistan: The Role of Teacher Education Institutions

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Abstract

Globalization has shown its miracles in every nook and cranny of this world, giving rise to increasing need for nurturing international mindedness and intercultural competence. Current research study is carried out with an aim to investigate the role of teacher education institutions in nurturing international mindedness and intercultural competence in prospective teachers studying in public sector higher education institutions of Sindh, Pakistan. The data were collected from a sample of 800 pre-service teachers enrolled in the University of Sindh, Jamshoro through survey method by using five point Likert Scale. The researcher applied statistical techniques including percentages, Chi-Square and regression for data analysis. The findings revealed that the status of international mindedness and intercultural competence in pre-service teachers was not praiseworthy. Further, the role of teacher education institutions was significantly correlated to the international mindedness and intercultural competence. However, teacher education institutions have not been able to adequately develop the international mindedness and intercultural competence in pre-service teachers.

Keywords: Teacher education institutions, international mindedness and intercultural competence

1. Introduction

Geographical barriers have been overcome and distances have been abridged to shrink the world into a global village which has intensified the inevitability of the interdependency between individuals, communities and nations (Zhao, 2010) [46]. The survival of nations mainly depends upon growth of trade, technology, communication, medication and education, which is not possible without international mindedness and intercultural competence (Harwood and Bailey, 2012) [20-21]. In this wake, new dimensions of teaching learning should be introduced and international mindedness and intercultural competence should be taught and learnt from global perspective (Crawford & Kirby, 2008). Studies have proven that individuals and communities with sounder international mindedness and intercultural competence can smoothly integrate into the nations from indifferent cultural contexts, thus proving their eligibility for a range of diverse career options (Elerian, 2020) [15]. While underscoring the significance of global mindedness and intercultural competence, Harrison (2014) [19] asserts that factors like growth of global economies and migration-leaning create a necessity for promoting international mindedness and cultural competence in students which would help them survive more efficiently in an internationally interdependent scenario and develop them into a global citizen.

International mindedness encompasses the capabilities of people to see, identify and analyze the global environment, norms, values, customs and cultures, where they are supposed

to live, interact and communicate (Schattle, 2008) [39]. International mindedness enables the individual to understand different cultures and challenges and suggests the ways and means to deal with those (Hill, 2012) [24-25]. Haywood (2007) [22-23] has identified five aspects of international mindedness in this regard. He has emphasized that those aspects should be discussed and cultivated in every individual. First, one should be curious to learn about the human and physical geography of the earth. Second, one should have openness (tolerance) to different cultural approaches. Third, one should have a scientific understanding that the earth is valuable and common to everyone. Fourth, one should be aware of why and how people are interrelated and interdependent. And fifth, one should have respect for differing cultural backgrounds. However, studies have also proven that creating international mindedness is not easy without developing intercultural competence.

Intercultural competence is the capability of people or nations to think logically, analyze wisely, act positively and deal effectively with different cultures (Meade, 2010) [32]. Intercultural competence enables individuals to work successfully with people across different cultures, living at home or abroad (UNESCO, 2013) [43]. Intercultural competence also includes the systems, agencies, and practitioners equipped with the capability to appropriately respond to the needs of people from other cultural backgrounds and integrate with them. In this regard, Dogra *et al.*, (2007) [14] affirm that cultural competence involves

systems, agencies and practitioners with the capacity to respond to the unique needs of populations whose cultures are different from that which might be called dominant or mainstream. It covers an ability to accept the people and practices indifferent from their own willfully (Cusher & Mahon, 2009) [8]. The impulse of cultural interdependence runs across all the levels from local through the national level and up to even international level. The need for promoting intercultural competence among learners is widely acknowledged. But it cannot be addressed without taking the teachers into the loop, and there comes the role of teacher education institutions (Deardroff, 2015).

The teacher education institutions have to cultivate the concept of international mindedness and intercultural competence in the behavioural pattern of the prospective teachers. In this regard, Harrison (2014) [19] and Hill (2012) [24-25] believe that teachers understand the inevitability of some strategies for surviving in an interrelated world and that they leave no stone unturned in cultivating international mindedness in their students. Advocating the same point, Black and Bernardes (2014) [5] also add that words uttered by teachers have a ripple effect on the student community, and the thoughts in their words remain alive to travel through generations.

Considering the need and importance of international mindedness and intercultural competence at local, national and international level, the current study has been conducted to improve the status of international mindedness and intercultural competence. The study also aimed to find out the relationship between two variables (international mindedness and intercultural competence) and role of teacher education institutions in this regard.

1.2 Research Objectives

1. To identify the status of international mindedness of pre-service teachers enrolled in teacher education institutions of Sindh.
2. To identify the status of intercultural competence of pre-service teachers enrolled in teacher education institutions of Sindh.
3. To appraise the role of teacher education institutions in developing international mindedness and intercultural competence in pre-service teachers in Sindh.

1.3 Research Questions

1. To what extent is the status of international mindedness satisfactory in pre-service teachers enrolled in public sector teacher education institutions of Sindh?
2. To what extent is the status of intercultural competence satisfactory in pre-service teachers enrolled in public sector teacher education institutions of Sindh?
3. To what extent is the role of teacher education institutions effective in developing the international mindedness and intercultural competence in pre-service teachers in Sindh?

1.4 Hypotheses

1. **Ho:** The status of international mindedness is not statistically significant in pre-service teachers studying in public sector teacher education institutions of Sindh.
2. **Ho:** The status of intercultural competence is not statistically significant in pre-service teachers studying in public sector teacher education institutions of Sindh.

3. **Ho:** The role of teacher education institutions is not significantly effective for developing the international mindedness in pre-service teachers in Sindh.
4. **Ho:** The role of teacher education institutions is not significantly effective for developing the intercultural competence in pre-service teachers in Sindh.

2. Review of Literature

2.1 International Mindedness and Cultural Competence

Globalization has casted its shadow in every nook and cranny of the world (Knight, 2003) [30]. Amid the cut-throat global competition, every nation is facing a range of new challenges and problems (Sampat kumar, 2007) [38]. It has made the life of people, especially in developing countries like Pakistan, challenging and complicated, where the key to survival is hidden in integration (Feyyaz, 2011). The nations who have adapted to globalization by developing global mindedness and global cultural competence have shown an upward trend (Van Alstine and Homes, 2016) [44].

There are different ways to cultivate global mindedness 'and intercultural competence' (Haywood, 2007) [22-23]. Informal practices for developing international mindedness 'and cultural competence' is not accessible for an ordinary local person or family; it is unorganized, unsystematic, unplanned, lifelong and a very costly process (Skelton, 2015) [40]. In this process, people have to live, interact and communicate with people from different countries and nations. While non-formal way, unlike informal one, is organized, systematic and planned although it takes place outside formally established institutions. However, the formal way for developing international mindedness and cultural competence takes place in formal educational institutions. According to this, IM is institutionalized into the vision, mission, objectives and curriculum of the institutions (Sriprakash *et al.*, 2014) [41]. This is where teacher education institutions play a vital role, with an aim to make the education internationally acceptable and learners globally welcomed.

The educational institutions have to cover a set of additional skills while preparing the pre-service teachers for global market (Hobson, 2007) [26]. Being an essential part of their role, the teacher education institutions have to keep themselves abreast with the global scenario and keep aligning their approach and content with the emerging needs of the world (Livingston, 2016) [31]. The importance of teacher education institutions is increasing day by day because interdependency among nations and societies has made it a pre-requisite for everyone to develop international mindedness and intercultural competence for their survival (DiYanni, 2007) [13]. International mindedness promotes global nationality as it develops an understanding on respecting one another (IBO, 2013) [27]. In this regard, VanAlstine and Homes (2016) [44] believe that the individual and community with limited international mindedness and intercultural competence are faced with several obstacles in the process of their survival, and success becomes increasingly inaccessible for them.

Briefly, globalization has multiplied challenges for people and nations, which cannot be handled without international mindedness and cultural competence. Arguably, the development of international mindedness and cultural competence comes to be the prime responsibility of teacher education institutions.

2.2 Role of Teacher Education Institutions in International Mindedness and Cultural Competence

The concept of international mindedness and cultural competence was first propounded in the twentieth century when the war-torn world had to respond to many complex challenges arising from the increasingly interdependent globalized world (Butler, 1917) [6]. At the dawn of the new millennium, the educators felt an intense need for promoting international mindedness and cultural competence, thereby helping their students in the face of enormous challenges and demands of the 21st Century (Cause, 2009) [7]. According to Taylor (2013) [43] there are two different methods to view global-mindedness. One is the ideological approach which is more conceptual whereas the other is the pragmatic approach which is its practical implications.

According to Deardorff (2011) [9] intercultural competence can be cultivated in two different ways. One way to nurture intercultural competence is through curriculum which is more formal way of doing. And the other way to cultivate this skill is through co-curricular activities which a more semi-formal and informal way of doing it. However, the best way to foster intercultural competence is to use both the approaches concurrently. Yet another point emphasized by Deardorff (2011) [9] is that by internationalizing the institution in terms

of its standards, norms, practices and principles, the institution can best equip its learners with the skills that they need to survive in 21st century challenges. The skills which will not only help them thrive in their personal life but also professional life.

The role of teacher education institutions is to equip teachers with a range of skills that they need for living in the global world efficiently. In this regard, Ahmad (2012) [1] believes that teacher institutions are responsible for building such skills essential for international mindedness and intercultural competence. She further adds that teacher training institutions are expected to satisfy both the theoretical and practical needs of international mindedness and intercultural competence. Bakhtiari (2011) [4], highlighting the challenges of teacher education institutions, affirms that in developing countries like Pakistan, teacher education institutions have not been able to reach their targets. The gaps in program contents of these institutions and the emerging professional needs of teachers have continuously been widening. Some empirical studies show that teacher education institutions have remained way behind in their target of adequately helping and preparing the teachers to deal with the upcoming needs of learning contexts.

2.3 Conceptual Framework

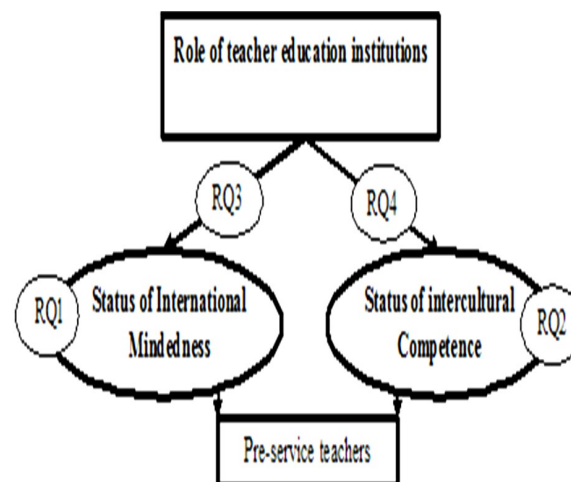


Fig 1: Conceptual framework

The conceptual framework presents the status and manipulation of variables (Robson, 2013) [37]. In this study the role of teacher education institution is an independent variable, while international mindedness and intercultural competence are dependent variables. Furthermore, the study assesses the status of international mindedness (RQ1) and intercultural competence (RQ2) and identifies the role of teacher education institutions in developing international mindedness (RQ3) and intercultural competence (RQ4) in pre-service teachers in Sindh.

3. Methodology

3.1 Research Approach/Method/Tool

The research approach adopted in this study was quantitative in which data were collected through survey method (questionnaire). Quantitative methodology, especially survey method, is widely used in different disciplines of social sciences (Ahmad *et al.*, 2019) [2]. It is not only generalize-able to larger population but also gives better results (Neuman, 2007) [33-34]. Fink (2003) [16] believes that Survey method is famous in every nook and corner for its high reliability and

validity. DeMarraiss & Lapan (2004) [11-12] confirm that survey not only covers larger population and sample but also produce more accurate, valid and reliable result. Likewise, Gray (2004) [17] adds that researchers widely use survey method in every field to evaluate beliefs, attitudes, customs, values, feeling, thinking, traditions, trends etc.

3.2 Population and Sampling

Population encompasses the group of people with common culture, civilization, language, belief, tradition, values and thinking (Creswell, 2012). The population in this study is limited to pre-service teachers enrolled in B. Ed and M. Ed in teacher education institution of Sindh. The population is further delimited to Allama I.I. Kazi, University of Sindh (SU) from which the sample of 800 (50%) pre-service teachers is selected through random stratified technique. The significant level ($\alpha=0.5$ and power=0.88) of sample was tested using power analysis technique. Furthermore, 376 respondents were randomly selected from M. Ed program and 424 from B. Ed program. In terms of gender distribution, there were 433 females and 367 males. In terms of geographical context, 571

of the respondents were from urban and 229 were from the rural context. Similarly, there were 208 students from off-campus (Weekend) programs, whereas 592 were from regular programs. In the same manner, there were 566 students from morning programs, whereas 234 were from evening

programs. Likewise, 623 students had an arts background, while 177 students had a science background. All of the 800 respondents, who participated in this study, had responded on a set of a self-administered questionnaire.

Table 1: Population and sample

S. No		Population	Sample	Percentage of population
1	Pre-service teachers enrolled in Allama I.I. Kazi, University of Sindh	1600	800	50%
2	M. Ed pre-service teachers	752	376	50%
3	B. Ed pre-service teachers	848	424	50%
4	Male pre-service teachers	734	367	50%
5	Female pre-service teachers	866	433	50%
6	Urban area pre-service teachers	1142	571	50%
7	Rural area pre-service teachers	458	229	50%
8	Regular enrolled pre-service teachers	1184	592	50%
9	Off campus (weekend)	416	208	50%
10	Morning shift pre-service teachers	1132	566	50%
11	Evening shift pre-service teachers	468	234	50%
12	Art enrolled pre-service teachers	1246	623	50%
13	Science enrolled pre-service teachers	354	177	50%

Source of Population: (Allama I. I. campus, 2022)

3.3 Research Instrument

The questionnaire used for this study was developed to understand the role of the public sector teacher education institutions in developing international mindedness and international competence in pre-service teachers. It essentially focused on the perception of B. Ed and M. Ed students. The questionnaire was designed using a Five Point Likert Scale divided into three sections; section one inquired about the status of IM, and section two asked about the status of IC,

whereas section three investigated how far the teacher education institutions developed these skills. The reliability of the data collection tool was checked procedurally. Subsequently, Cronbach's Alpha was applied to find the reliability of the questionnaire which was 0.91. Likewise, the data were analyzed using SPSS software version-26 in which the item analysis was done through percentages and Chi-Square. However, the hypotheses were tested with the help of Chi-Square and regression.

4. Results

4.1 Item analysis

Table 2: Item analyses

S. No	Items	Responses (% and X2)						
		SD	D	UN	A	SA	X2	Sig
1.	The status of international mindedness in pre-service teachers of govt. Institutions is satisfactory in Sindh.	59.5	6.4	3.2	27.7	3.2	1306.36	00
2.	The pre-service teachers have a scientific understanding that the earth is valuable.	15.6	60.6	3.9	15.9	3.9	1212.70	00
3.	The pre-service teachers realize that the safety of earth is common for everyone.	4.9	52.2	2.5	2.5	38.0	1211.70	00
4.	The pre-service teachers are curious to learn about the physical geography of the earth.	84.4	3.9	3.9	3.9	3.9	2848.09	00
5.	The pre-service teachers have the awareness that people are interrelated in globalization.	3.4	3.4	6.5	79.8	6.9	2466.28	00
6.	The pre-service teachers believe that people are interdependent in globalization.	14.5	5.9	3.0	52.7	23.8	881.63	00
7.	The pre-service teachers feel satisfied living comfortably with other people in the globalization.	8.7	23.9	.3	11.5	55.5	1026.56	00
8.	The pre-service teachers feel satisfied buying global products.	3.3	17.6	3.8	55.9	19.4	1010.40	00
9.	The pre-service teachers regularly discuss global problems at formal and informal gatherings.	73.2	3.3	.1	13.5	10.0	2006.03	00
10.	The pre-service teachers respond positively to the problems and issues taking place in the global world.	22.4	56.6	.3	0.8	19.9	1157.71	00
11.	The pre-service teachers have a sense of what causes conflicts between different countries in the globalization.	7.6	11.5	.4	72.5	8.0	1927.97	00
12.	The pre-service teachers feel personally responsible for some of the global problems.	85.0	.1	.8	3.5	10.5	2942.20	00
13.	The pre-service teachers feel frustrated hearing that millions of people are starving in Africa.	7.7	3.8	.4	64.5	23.5	1537.21	00
14.	The pre-service teachers feel upset hearing that basic rights of people are not respected in different parts of world.	9.2	.2	5.0	51.2	34.5	1053.82	00
15.	The pre-service teachers feel responsibility to do something for millions of people affected by flood or other natural disasters in different parts of world.	11.7	60.6	3.9	0.3	23.5	1308.87	00

16.	The pre-service teachers eagerly volunteer time and energy to help people outside the country.	52.6	8.5	.1	2.8	35.9	1177.56	00
17.	The pre-service teachers partake in nurturing the environment through service activities like tree planting.	31.5	7.8	.1	56.7	3.8	1258.84	00
18.	The status of intercultural competence in pre-service teachers studying in public sector teacher education institutions is satisfactory in Sindh.	15.6	72.4	4.1	7.8	0.1	1957.37	00
19.	The pre-service teachers have a curiosity to learn about the human cultures around the world.	7.5	76.1	0.9	3.8	11.7	2199.08	00
20.	The pre-service teachers often discuss with friends about the global cultures.	23.2	56.7	4.1	0.3	15.7	1110.74	00
21.	The pre-service teachers have respect (openness) for different cultures around the world.	7.6	16.0	.1	64.5	11.7	1439.88	00
22.	The pre-service teachers believe that culture is a way of life adapted by people according to their needs and interests in the globalization.	11.6	8.6	.2	23.5	56.0	1045.23	00
23.	The pre-service teachers take keen interest in learning global language.	19.3	60.7	.2	4.0	15.8	1279.09	00
24.	The pre-service teachers believe that mutual respect for each other's' languages, beliefs, values and customs can minimize conflicts between people and nations.	26.8	3.9	1.3	12.0	56.0	1108.86	00
25.	The pre-service teachers like to work with people from other cultures who think differently in the globalization.	3.9	27.5	4.6	4.0	60.0	1323.59	00
26.	The role of teacher education institutions in developing international mindedness in pre-service teachers is satisfactory.	19.1	64.6	.5	11.9	3.9	1484.80	00
27.	The role of teacher education institutions in developing intercultural competence in pre-service teachers is satisfactory.	9.5	72.4	.9	12.1	5.2	1924.86	00
28.	Teacher education institutions promote a sense of pluralism in pre-service teachers.	57.5	4.9	2.5	2.5	32.7	1324.54	00
29.	Teacher education institutions equip pre-service teachers with a psycho-socio environment welcoming to the people from all cultural and ethnic background.	15.6	3.9	3.9	15.9	60.6	1212.71	00
30.	Teacher education institutions integrate the classroom teaching with global examples while teaching to pre-service teachers.	4.9	56.9	2.5	33.3	2.5	1310.03	00
31.	Teacher education institutions share with pre-service teachers the examples and practices from diverse cultural background of Europe and other continents.	84.4	3.9	3.9	3.9	3.9	2848.09	00
32.	Teacher education institutions inspire pre-service teachers to practice and promote multi-cultural competence for the survival and success in global scenario.	83.3	2.8	5.3	2.8	5.8	2756.54	00
33.	Teacher education institutions often make pre-service teachers realize how global issues impact the local people.	51.6	27.1	1.5	11.8	8.0	883.31	00
34.	Teacher education institutions make pre-service teachers realize that how actions taken locally can impact the global scenario like gardening or hate speeches.	5.2	59.8	.6	7.2	27.2	1317.74	00
35.	Teacher education institutions teach pre-service teachers the ways to cultivate in students a tendency of acceptance and pluralism for each other and other nations.	56.2	21.5	2.2	17.1	3.1	1057.71	00

Analysis: Referring to Chi-Square table, it has been observed that chi-square value for all the items (1-35) is significant ($p = 000 \leq .05$). It is, therefore, concluded that:

- The status of international mindedness in pre-service teachers of public universities is not satisfactory in Sindh.
- The pre-service teachers do not have a scientific understanding that the earth is valuable.
- The pre-service teachers do not realize that the safety of earth is common for everyone.
- The pre-service teachers are not curious to learn about the earth's physical geography.
- The pre-service teachers have the awareness that people are interrelated in the globalization.
- The pre-service teachers believe that people are interdependent in the globalization.
- The pre-service teachers feel satisfied living comfortably with other people in the globalization.
- The pre-service teachers feel satisfied buying products of international companies.
- The pre-service teachers do not discuss global problems at formal and informal gatherings.
- The pre-service teachers do not respond positively to the problems and issues in the global world.
- The pre-service teachers have a sense of what causes conflicts between different countries in globalization.
- The pre-service teachers do not feel responsible for some of the global problems.
- The pre-service teachers feel frustrated hearing that millions of people are starving in Africa.
- The pre-service teachers feel upset hearing that people's fundamental rights are not respected in different parts of the world.
- The pre-service teachers do not feel responsible for millions of people affected by floods in different parts of the world.
- The pre-service teachers do not volunteer time and energy to help people outside the country.
- The pre-service teachers nurture the environment through service activities like tree planting.
- The status of intercultural competence in pre-service teachers studying in public sector teacher education institutions is not satisfactory in Sindh.
- The pre-service teachers do not have a curiosity to learn about the human cultures worldwide.
- The pre-service teachers do not discuss with friends about the global cultures.
- The pre-service teachers have respect (openness) for different cultures around the world.
- The pre-service teachers believe that culture is a way of life adapted by people according to their needs and interests in the globalization.
- The pre-service teachers do not take a keen interest in learning the global language.

24. The pre-service teachers believe that mutual respect for each other's languages, beliefs, values and customs can minimize conflicts between people and nations.
25. The pre-service teachers like to work with people from other cultures who think differently in the globalization.
26. The role of teacher education institutions in developing international mindedness in pre-service teachers is not satisfactory.
27. The role of teacher education institutions in developing intercultural competence in pre-service teachers is not satisfactory.
28. Teacher education institutions do not promote a sense of pluralism in pre-service teachers.
29. Teacher education institutions equip pre-service teachers with a psycho-socio environment welcoming people from all cultural and ethnic backgrounds.
30. Teacher education institutions do not integrate classroom teaching with global examples while teaching pre-service teachers.
31. Teacher education institutions do not share with pre-service teachers the examples and practices from the diverse cultural background of Europe and other continents.
32. Teacher education institutions do not inspire pre-service teachers to practice and promote multi-cultural competence for survival and success in the global scenario.
33. Teacher education institutions do not make pre-service teachers realize how global issues impact the local people.
34. Teacher education institutions do not make pre-service teachers realize that actions taken locally can impact the global scenario like gardening or hate speeches.
35. Teacher education institutions do not teach pre-service teachers how to cultivate in students a tendency to accept and pluralism for each other and other nations.

4.2 Result of Hypotheses

Table 3: Result of hypothesis one and two

S. No	Sample n=1100	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Chi-Square	Sig.
Ho1	Observed	35	70	35	305	655	1306.364	0.000
	Expected	220.0	220.0	220.0	220.0	220.0		
	Residual	-185.0	-150.0	-185.0	85.0	435.0		
Ho2	Observed	172	86	45	796	1	1957.373	0.000
	Expected	220.0	220.0	220.0	220.0	220.0		
	Residual	-48.0	-134.0	-175.0	576.0	-219.0		

Analysis: Referring to table 3, it has been found that the value of Chi-Square for hypotheses one and two at df= 4, alpha= 0.05 is significant (Ho1: 1306.364 & p =000 ≤.05 and Ho2: 1957.373 & p =000 ≤.05). It is, therefore, concluded that the

status of international mindedness is not statistically significant in pre-service teachers. Likewise, the status of intercultural competence is not statistically significant in pre-service teachers.

Table 4: Result of hypothesis three and four

Model Summary		R	R ²	Adjusted R	S. Error of Estimate	Change Statistics					
						R Square Change	F Change	df1	df2	Sig.	
	IM	.856	.732	.732	.736	.732	2999.63	1	1098	.00	
	ICC	.825	.680	.680	.404	.680	2337.85	1	1098	.00	
			Sum of Squares			Mean Square			df	F	Sig.
ANNOVA	IM	Regression			1622.784	1622.784			1	2999.64	.00
		Residual			594.012	.541			1098		
		Total			2216.795				1099		
	ICC	Regression			381.203	381.203			1	2337.85	.00
		Residual			179.037	.163			1098		
		Total			560.240				1099		
Coefficient					Unstandardized Coefficients		Standardized Coefficients		t	Sig.	
					B	Std. Error	Beta				
	IM	(Constant)			.325	.039			8.332	.00	
		Role of teacher education institutions			1.028	.019	.856		54.769	.00	
	ICC	(Constant)			.648	.031			20.749	.00	
Role of teacher education institutions			.602	.012	.825		48.351	.00			

Analysis: The result of hypotheses three and four as indicated in table four shows that the independent variable (role of

teacher education institutions) and dependent variables (international mindedness and intercultural competence) are

very strongly correlated (international mindedness: $p=000$, $r=.856$ & intercultural competence: $p=000$, $r=.825$). Additionally, international mindedness and intercultural competence can significantly be predicted from the role of teacher education institutions because the contribution of R^2 is 73.2% and 68% respectively. Furthermore, the significant F value (international mindedness: $p=000$, $F=2999.64$ and intercultural competence: $p=000$, $F=2337.85$) indicates that the model is fit for making prediction. Also, the significant t value (international mindedness: $p=000$, $t=54.769$ and intercultural competence: $p=000$, $t=48.351$) indicates that changes in international mindedness and intercultural competence occur due to change in the role of teacher education institutions. Hence, null hypotheses three and four are rejected and it is stated that the role played by public sector teacher education institutions in developing international mindedness and intercultural competence in pre-service teachers is statistically significant in Sindh.

4.3 Discussion

4.3.1 The status of International Mindedness (IM)

The result of RQ1, as perceived by respondents, revealed that the status of international mindedness in pre-service teachers was not praiseworthy. Most of the teachers appeared to be scientifically unfamiliar with the significance of earth as to how the threat to the ecological atmosphere ultimately affects their life in terms of their physical health and psychological well-being. They were found to be unconscious of their role in contributing to the sustainable ecological change in the world. The realization to respond to the need for recycling or plantation was quite limited or none among the teachers. The pre-service teachers largely admitted their satisfaction in co-existing and working with people of other cultures. They felt comfortable in collaborating with people from diverse socio-cultural backgrounds, which showed their innate tendency to integrate with different cultures. Even so much so that they seemed to harbour no hesitancy in buying products of international brands, which was a promising gesture.

However, the prospective teachers did not find much interest in global issues like political tension between countries, etc. They did not realize that these elements affected their lives and that they were more concerned about their own local problems. Although these teachers claimed to know the underlying causes of the global conflicts in general, they believed that they had no responsibility to act locally towards resolving them. Despite the fact that these upcoming teachers claimed to feel the pain for the sufferings of the disaster-hit, war-stricken or poverty-ridden people in different parts of the world, they would deem themselves helpless to play any role in this regard. Additionally, these teachers showed concern for the people who had been deprived of their basic rights, but they believed that they could do nothing in this regard as they had not caused these issues. Moreover, the concept of volunteerism and social service were alien to them, so they showed no participation in activities like recycling or plantation or any other social service to support any noble cause. The unawareness of these teachers that voluntarism and selfless social acts can bounce back to making their own lives easier is not a positive sign that needs to be addressed through teacher education institutions.

The study revealed that the status of international mindedness in teachers enrolled in state-owned teacher education institutions is relatively low. It comes in consistency with the finding of another empirical study conducted by Habib, 2018 in the same area which revealed that the pre-service teachers

hold limited knowledge and skills related to international mindedness. Likewise, the finding of this research also agrees with the results of another study conducted by Wilkinson and Hayden's (2010) which showed that there was a positive but small movement towards Internationally-Minded attitudes among teachers and students of Lesotho, South Africa, Zambia, Hong Kong, Thailand, Singapore and India.

4.3.2 The status of Intercultural Competence (IC)

The result of RQ2, as perceived by respondents, revealed that the status of intercultural competence in pre-service teachers studying in state-owned teacher education institutions was not satisfactory. Although the prospective teachers were equipped with the curiosity to learn about the diverse human cultures, discussing cultures of different nations and communities was not a matter of their interest due to lack of motivation. However, the pre-service teachers claimed to be open to working with people of other ethnic or socio-cultural backgrounds and that they respected the values embedded in other cultures. Most of the teachers believed that respecting different religious beliefs, cultural values, social practices, and ethnic backgrounds could help reduce the mutual conflicts between communities and nations at large.

Furthermore, it was found that these teachers did not know the strategies to cultivate the intercultural competence helpful for behaving smartly and positively with people from varied cultural backgrounds. The absence of these skills in prospective teachers would deprive their students of learning ways to integrate with other cultures. The deprivation of these skills would turn out to be a massive obstacle in their lives, holding them back from succeeding in their personal, educational, and professional lives.

The finding of this study is in line with the finding of another empirical study conducted by Jiang *et al.* 2020. Moreover, the findings of this study also shows consistency with the results of another study conducted by Karras, 2017, which indicated that the students of various universities located in Europe did not show the tendency to learn various foreign languages, being the core component of every culture, but they did have respect for other cultures and their traditional rituals.

However, the finding of this study contradicts with another study conducted by Polat & Ogay, 2014, which showed that the level of intercultural competence in some of the developed countries like Switzerland and Turkey was fairly high.

4.3.3 Role of Teacher Education Institutions in Developing IM & IC in Prospective Teachers

The results of RQ3 and RQ4 revealed that the role of teacher education institutions was very strongly correlated to international mindedness and intercultural competence. Effective role would have promoted the international mindedness and intercultural competence. However, the role of teacher education institutions failed to promote international mindedness and intercultural competence in pre-service teachers. There had been found no conscious efforts on part of the teacher education institutions to cultivate these learning dimensions. The international mindedness and cultural competence had not been found in the contents of their programs as an essential feature. However, these institutions were found to welcome students from diverse socio-cultural backgrounds openly and warmly.

Furthermore, the classroom teachings in these institutions did not incorporate global examples in terms of concepts or pedagogical techniques, limiting learners' mental horizons while keeping their ideas shallow and narrow. The teacher

education institutions did not have discussions focused on sensitizing the pre-service teachers to their role regarding global issues. However, pre-service teachers were not found to be informed about how these global issues affected them ultimately at the local level and how their actions would contribute to reducing the intensity of the impact of the global issues. Avoiding hate speeches, promoting voluntarism and social welfare campaigns like recycling, cleanliness, and gardening were not the part of the serious discussions at these institutions, which was needed. Even the teacher education institutions were found to play hardly any role in equipping pre-service teachers with the strategies to cultivate a sense of acceptance and pluralism in their students at the school level, which was not praiseworthy.

The finding of this study agrees with the results of another study conducted by Nganga, (2019) [35], which revealed that the role of teacher education institutions is not up mark and needs to be widened to develop the international mindedness and intercultural among the pre-service teachers.

5. Conclusion and Recommendations

5.1 Conclusion

In light of the main findings of this study, it has been concluded that the status of international mindedness and intercultural competence in the pre-service teachers studying in public sector teacher education institutions of Sindh, Pakistan is way behind being satisfactory. Furthermore, the role of teacher education institutions was very strongly correlated with international mindedness and intercultural competence. However, the public sector teacher education institutions have not been able to play a substantive role in developing international mindedness and intercultural competence in pre-service teachers. The limited sensitivity to the international mindedness and intercultural competence among the prospective teachers is not appreciable as it will not only limit their eligibility to adjust in diverse cultural contexts but also hold them back from playing their role in communicating these concepts to their students, thereby limiting the employability of their students as well. The unfamiliarity with other cultures will tend to cultivate a tendency to become narrow-minded, conservative, and intolerant, which may develop them into antisocialists for a mainstream global society.

5.2 Practical Implication

The finding of this study is very beneficial for policy makers and implementers in different ways. They would know the current status of international mindedness and intercultural competence and use the finding of this study to fill the gaps. They would also identify the role of teacher education institutions and accordingly accelerate its role by integrating latest teaching methods to maximize the output. The curriculum and books could also be modified in the light of the findings of this study. The appointment can be made and training of teachers can be conducted considering the role of teacher education institution highlighted in this study.

5.3 Recommendation from the Findings

1. As the status of international mindedness is not satisfactory among pre-service teachers, it is advisable to embed the contents related to international mindedness in the teaching content of various teacher education programs.
2. As the status of intercultural competence in pre-service teachers is not satisfactory, it is recommended that

elements of intercultural competence should be incorporated into the contents of the teacher education programs.

3. As pre-service teachers are mainly unconscious of the significance and pervasive impact of international mindedness, they should be sensitized to this cutting-edge aspect of soft skills.
4. The pre-service teachers should be made conscious of the role of international mindedness and intercultural competence as to how it maximizes the adaptability and employability of an individual in personal and professional life.
5. It should be communicated to the pre-service teachers as to how global issues like terrorism, intercultural conflicts and cutting-edge scientific discoveries affect them locally.
6. Pre-service teachers at the teacher education institutions should be made conscious about how their local actions can eventually contribute to the global scenario in one way or the other.
7. Pre-service teachers at public sector teacher education institutions should be equipped with the strategies to promote a tendency of accepting different cultures and practising pluralism to co-exist cordially.
8. Teacher education institutions should organize various intercultural promotional programs for the teacher-students while highlighting the significance of traditions as colours of values and rituals in life.

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