

**PRE-SERVICE TEACHERS' INTERNATIONAL
MINDEDNESS AND INTERCULTURAL
COMPETENCE IN PUBLIC UNIVERSITIES OF
PAKISTAN**

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**PRE-SERVICE TEACHERS' INTERNATIONAL
MINDEDNESS AND INTERCULTURAL
COMPETENCE IN PUBLIC UNIVERSITIES OF
PAKISTAN**

by

KAMRAN HYDER

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LIST OF ABBREVIATIONS

ACTFL	American Council on the Teaching of Foreign Languages
ADE	Associate Degree in Education
AMOS	Analysis of Moment Structures
BEVI	Beliefs, Events, and Values Inventory
CCAI	Cross-Cultural Adaptability Inventory
CFA	Confirmatory Factor Analysis
CQ	Cultural Intelligence
CSI	Culture Shock Inventory
CT	Certificate in Teaching
DMIS	Developmental Model of Intercultural Sensitivity
EFA	Exploratory Factor Analysis
ETR	Effective Transition Rate
GCAA	Global Competence Aptitude Assessment
GCED	Global Citizenship Education
GCI	Global Competencies Inventory
GCS	Global Citizenship Scale
GER	Gross Enrolment Ratio
GIR	Gross Intake Ratio
GMD	Global Mindedness Dispositions
GMS	Global Mindedness Scale
GPI	Global Perspective Inventory
HEC	Higher Education Commission
IC	Intercultural Competence
ICAPS	Intercultural Adjustment Potential Scale
ICC	Intercultural Communicative Competence

ICQ	Intercultural Competence Questionnaire
ICSI	Intercultural Sensitivity Inventory
IDI	Intercultural Development Inventory
IER	Institutes of Education and Research
IES	Intercultural Effectiveness Scale
IM	International Mindedness
MPQ	Multicultural Personality Questionnaire
NEP	National Education Policy
NTHP	National Talent Hunt Program
OGDCL	Oil and Gas Development Corporation Limited
OOSC	Out of School Children
PITE	Provincial Institutes of Teacher Education
PTC	Primary Teaching Certificate
SDG	Sustainable Development Goal
SEM	Structural Equation Modeling
SIT	Social Identity Theory

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**PEMIKIRAN ANTARABANGSA DAN KECEKAPAN ANTARA BUDAYA
GURU-GURU PRA-PERKHIDMATAN DI UNIVERSITI AWAM DI
PAKISTAN**

ABSTRAK

Gelombang globalisasi moden telah mencetuskan permintaan terhadap peningkatan pemikiran antarabangsa (IM) dan kompetensi antara budaya (IC) dalam kalangan graduan yang akan memasuki tenaga kerja abad ke-21. Untuk memenuhi keperluan ini, institusi pendidikan mesti memberi tumpuan kepada IM dan IC kerana konsep-konsep ini memperluaskan pemikiran serta membina toleransi dan rasa hormat terhadap budaya dan komuniti lain, sekali gus menyumbang kepada keamanan dan keharmonian. Oleh itu, kepentingan guru yang berfikiran antarabangsa dan sedar antara budaya tidak boleh dipandang remeh dalam senario global masa kini. Walau bagaimanapun, di Pakistan, guru pelatih hanya didedahkan kepada kandungan kursus yang meningkatkan IM dan IC mereka. Oleh itu, kajian ini menyiasat IM dan IC dalam kalangan guru pelatih di universiti-universiti di Pakistan berkaitan dengan tahun pengajian dan jantina mereka. Kajian ini juga bertujuan mengenal pasti faktor-faktor yang mempengaruhi perkembangan kemahiran ini serta meneroka hubungan antara IM dan IC serta dimensinya. Dengan menggunakan pendekatan kaedah campuran serentak, kajian ini mengumpulkan data daripada sampel 516 guru pelatih dari dua universiti awam di Pakistan. Alat pengumpulan data termasuk soal selidik tinjauan dan temubual separa berstruktur. Kajian ini menggunakan Skala Pemikiran Global (GMS) untuk mengukur IM dan Inventori Perspektif Global (GPI) untuk mengukur IC dalam kalangan guru pelatih. Seterusnya, dalam bahagian kualitatif kajian, sepuluh

responden telah mengambil bahagian dalam temubual separa berstruktur menggunakan pensampelan bertujuan. Data kuantitatif dianalisis menggunakan statistik deskriptif dan inferens, termasuk ujian-t sampel bebas, ujian MANOVA sehalu, dan ujian korelasi Pearson dalam SPSS (Versi 26). Tambahan pula, Analisis Faktor Eksploratori (EFA) dijalankan untuk mengenal pasti dimensi asas, dan Analisis Faktor Pengesahan (CFA) mengesahkan model struktur. Selain itu, hubungan bersarang antara pembolehubah dianalisis menggunakan perisian Pemodelan Persamaan Struktur (SEM) AMOS. Untuk bahagian kualitatif, analisis tematik dilakukan pada temubual yang telah ditranskripsi. Penemuan mengenai IM dan IC menunjukkan bahawa guru pelatih menunjukkan tahap IM dan IC yang tinggi. Selain itu, keputusan ujian-t dan MANOVA sehalu menunjukkan bahawa guru pelatih senior memperoleh skor min yang jauh lebih tinggi pada IM dan lima dimensinya (iaitu Keberkesanan, Tanggungjawab, Pluralisme Budaya, Hubungan Global, dan Sentrisme Global) dan IC pada enam dimensinya (Pengetahuan-Kognitif, Mengetahui-Kognitif, Identiti-Intrapersonal, Afek-Intrapersonal, Tanggungjawab Sosial-Interpersonal, dan Interaksi Sosial-Interpersonal) berbanding guru pelatih junior, sementara tiada perbezaan jantina yang signifikan ditemukan dalam IM dan IC. Akhirnya, penemuan menunjukkan hubungan yang signifikan antara IM dan IC guru pelatih serta dimensinya masing-masing. Penemuan bahagian kualitatif menekankan keterbukaan, toleransi, penerimaan, penghormatan, dan penyesuaian terhadap pelbagai budaya, nilai, dan gaya hidup sebagai unsur utama dan indikator IM. Pada masa yang sama, IC dibentuk oleh tanggungjawab sosial, empati bersama, kepelbagaian sosial, sosialisasi, penerimaan, dan keterbukaan fikiran. Penemuan ini disepadukan dengan hasil kuantitatif kajian untuk membincangkan strategi bagi meningkatkan IM dan IC guru pelatih. Keseluruhan penemuan ini mempunyai implikasi kepada institusi pendidikan

guru, guru pelatih dan guru yang sedang berkhidmat, pereka kurikulum, dan pembuat dasar pendidikan. Oleh itu, semua pihak berkepentingan perlu mengambil langkah untuk terus membantu guru pelatih meningkatkan IM dan IC mereka.

**PRE-SERVICE TEACHERS' INTERNATIONAL MINDEDNESS AND
INTERCULTURAL COMPETENCE IN PUBLIC UNIVERSITIES OF
PAKISTAN**

ABSTRACT

The modern wave of globalization has created a demand for increased international mindedness (IM) and intercultural competence (IC) among graduates who will soon enter the 21st-century workforce. To meet this end, educational institutes must focus on IM and IC as these notions broaden thinking and build tolerance and respect for other cultures and communities, thus contributing to peace and harmony. Hence, the importance of internationally minded and interculturally aware teachers cannot be underestimated in today's global scenario. However, in Pakistan, pre-service teachers are merely exposed to the course contents which enhance their IM and IC. Therefore, the present study investigates the IM and IC among pre-service teachers in universities of Pakistan in relation to their year of study and gender. The study also aims to identify the factors that influence the development of these skills and to explore the relationship between IM and IC and their dimensions. Using a concurrent mixed-methods approach, the study collected data from a sample of 516 pre-service teachers from two public universities in Pakistan. The data collection tools included a survey questionnaire and semi-structured interviews. The study used the Global Mindedness Scale (GMS) to measure IM and the Global Perspective Inventory (GPI) to measure IC among pre-service teachers. Subsequently, in the qualitative part of the study, ten participants participated in the semi-structured interviews by using purposive sampling. Quantitative data were analyzed using descriptive and inferential statistics, including the Independent-samples t-test, one-

way MANOVA test, and Pearson correlation test in SPSS (Version 26). Furthermore, Exploratory Factor Analysis (EFA) was conducted to identify the underlying dimensions, and Confirmatory Factor Analysis (CFA) validated the structural model. Additionally, nested relationships between variables were analyzed using Structural Equation Modeling (SEM) software (AMOS). For the qualitative part, thematic analysis was performed on the transcribed interviews. The findings on IM and IC revealed that pre-service teachers exhibited high IM and IC levels. Additionally, the results of the t-test and one-way MANOVA showed that senior pre-service teachers exhibited significantly higher mean scores on the IM and its five dimensions (i.e., Efficacy, Responsibility, Cultural Pluralism, Interconnectedness, and Global Centrism) and IC on its six dimensions (Cognitive-Knowing, Cognitive-Knowledge, Intrapersonal-Identity, Intrapersonal-Affect, Interpersonal-Social Responsibility, and Interpersonal-Social Interaction) than junior pre-service teachers. The results did not find significant gender differences in either IM or IC. Finally, the findings indicated a significant association between pre-service teachers' IM and IC and their respective dimensions. The findings of the qualitative part emphasized openness, tolerance, acceptance, respect, and adaptation to various cultures, values, and lifestyles as key constituents and indicators of IM. At the same time, IC was constituted by social responsibility, mutual empathy, social diversity, socialization, acceptance, and fair-mindedness. These findings were triangulated with the study's quantitative results to discuss strategies for improving pre-service teachers' IM and IC. The overall findings have implications for teacher education institutes, pre- and in-service teachers, curriculum designers, and educational policymakers. Therefore, all stakeholders must take steps to further assist pre-service teachers in improving their IM and IC.

CHAPTER 1

INTRODUCTION OF THE STUDY

1.1 Introduction

The introductory sections provide a holistic and detailed overview of the present study. The section initiates with a discussion of the background of the study, the importance of study variables, and an exploration of the educational landscape of Pakistan. The discussion led to the formulation of the problem statement, which needed the development of research questions and objectives. The chapter ends with a discussion of operational definitions and the organisation of chapters, followed by the chapter summary.

1.2 Background of Study

Across the globe, the education system in the 21st century is undergoing significant changes, influenced by various factors such as technological advancements, globalisation, and evolving societal needs (Saufi et al., 2020). As a result, global societies face growing cultural, linguistic, and socio-economic diversity; so, teachers are required to be more flexible in accepting diversity. Specifically, the evolution of technology in the field of education over the past few decades has changed the role of traditional teachers to equip themselves with a global orientation to provide contemporary learning experiences to students (Lai et al., 2014). Therefore, there is a dire need for the teacher education institutes to manage and address this diversity in their everyday academic practices.

The evolving landscape of the education sector endorses the development of future educational staff, i.e., teachers who show cosmopolitanism (Lai et al., 2014; Cambridge & Thompson, 2003; Hill, 2000). Cosmopolitanism refers to identifying international interconnections and cultural variety, along with having a broad-mindedness and ideological character. In addition, the concepts define the peaceful integration of varied cultures in personal interactions. Further, it involves the ability to adapt and navigate smoothly in unfamiliar situations (Lai et al., 2014). Literature shows two terms that come under the umbrella of cosmopolitanism, that is, International Mindedness (IM) and Intercultural Competence (IC), which are also the exclusive focus of present research. IM involves cultivating a conscious and empathetic attitude towards global concerns and the diversity of cultures. In contrast, IC refers to the abilities required to interact with individuals from different cultures successfully.

When it comes to modern-day teachers, the concept of IM is necessary to stress teachers to create the ability to think globally, embrace diverse cultures, and understand diverse perspectives in classrooms. In addition, the IM contains essential knowledge and skills for Worldwide interdependence and is considered the fundamental goal of intercultural education (Harwood & Bailey, 2012; Hill, 2007). In this context, some notable scholars and teachers endorsed the concept of IM (Hacking et al., 2017; Hayden & Thompson, 2013; Singh & Qi, 2013) which enables teachers to integrate multicultural content, global perspectives, and international examples into their teaching, making the learning experience more engaging and relevant for students. In addition, it is also seen that these researchers share a common philosophical understanding of IM; however, their interpretations may vary. For

example, Marshall (2007) holds the same concept of IM but uses terminology different from IM, such as global awareness.

The literature classified the concept of IM into distinct categories, including Diplomatic IM, Political IM, Human Rights IM, Globalization IM, and Multicultural IM (Haywood, 2007). Nevertheless, the researchers show consensus that teachers should not prioritise any IM but rather encourage a broad inclination of students toward IM. Moreover, Haywood (2007) proposed that openness is a key and fundamental aspect of IM and that it is a key driver to enabling diverse learning horizons. However, Hill (2007) highlighted the role of IM in promoting ideals in students that help them become responsible global citizens.

Within the context of education, Muller (2012) pointed out the description of IM as a form of instruction that aims to reduce cultural bias, increase awareness and respect for international cultural perspectives, and foster a global perspective. Both Hill and Muller focused on IM in the education field, but Haywood took a broader view. Therefore, it may be inferred that Haywood, Hill, and Muller praised the quality of being receptive to new ideas, which subsequently diminishes the tendency to view individual cultures as superior and fosters admiration for other civilisations.

Similarly, Duckworth et al. (2005) highlighted the importance of IM in educators, supporting teachers in moving beyond ethnocentric viewpoints and behaviours. According to Harwood and Baily (2012), their approach encompasses a broad range of understanding and involvement in citizenship in both domestic and global contexts. Therefore, they approach IM from a national standpoint. It also suggests that being open-minded fulfils the role of responsible citizens at both national and international levels. Teachers in this context, with the help of IM, can help students

develop intercultural competence, empathy, and a broader worldview, which are essential skills for success in the globalised workforce.

Along with IM, the present study focused on fostering IC among teachers. Deardorff (2009) defined IC as the ability to communicate properly and efficiently in cross-cultural contexts. Deardorff expanded on the concept of IC, emphasising that it goes beyond the identification of cultures. It entails the ability to acknowledge, appreciate, and even accommodate cultural differences. In addition, Hiller and Wozniak (2009) additionally stated that IC exhibits and interacts with people from diverse cultural backgrounds without any hesitation. There are researchers such as Romijn et al. (2020) and Bennett (2004) utilise the notion of IC sensitivity to explain how teachers perceive and interact with cultural disparities, as well as how they cultivate the ability to share experiences that resonate with those from diverse cultures.

Gender roles and societal norms in Pakistan significantly influence educational experiences and opportunities. Female and male pre-service teachers may experience and exhibit varying levels of international mindedness and intercultural competence. Additionally, the progression from junior to senior levels in teacher education programs may contribute to the development of these competencies. Investigating these aspects provides insights into how teacher education programs can be tailored to address gender-specific needs and promote equitable learning outcomes.

Universities in Pakistan operate in diverse socio-cultural and economic settings, affecting the development of international mindedness and intercultural competence. Public universities, in particular, serve a broad demographic, including students from rural and urban backgrounds. This study examines how university

environments influence the cultivation of these competencies, highlighting institutional challenges and opportunities.

The teacher education institutes play a crucial role in supporting pre-service teachers by recognizing their cultural backgrounds. This includes understanding their unique cultural knowledge, experiences, and ways of learning, which helps tailor teaching to meet their needs effectively (Romijn et al., 2020). Dunn and Wallace (2006) emphasize that teachers need to adapt their teaching styles to fit culturally diverse classrooms, avoid biased assessments, and respect all cultures equally. Similarly, Heyward (2002) advocates for adding intercultural literacy to the curriculum to help students develop the skills needed to succeed in today's globalized world. Meanwhile, Dooley and Villanueva (2006) argue that intercultural education is essential for preparing teachers to work effectively in diverse classrooms.

The research of Dooley and Villanueva (2006) was supported by Dunn and Wallace (2006), who stressed that there should be no bias while incorporating culture teaching. Furthermore, they emphasize that IC goes beyond avoiding criticism and instead values all cultures, promoting the growth of IM. Holistically, Vooren and Lindsey (2012) regarded IM and IC as mutually reinforcing concepts. The researchers' opinions thus revealed a nuanced correlation between IM and intercultural understanding.

To enhance teachers' IM and IC, the previous researchers, i.e., Dooly and Villanueva (2006), Heyward (2002), and Duckworth et al. (2005), have proposed professional development to attain benefits. In this view, Duckworth et al. (2005) stressed the importance of cultural involvement in developing teachers' IM since it significantly facilitates the ability of cultural diversity. Nevertheless, according to

Heyward (2002), cultural involvement alone was not enough to develop intercultural literacy (Habib, 2018).

The government of Pakistan has outlined goals in its National Education Policy and related documents, emphasizing the importance of intercultural competence and international mindedness in teacher education (Government of Pakistan, 2021). However, specific figures and detailed data on their implementation or impact are sparse in publicly accessible government documents. Below are some key highlights and sources related to issue:

The National Education Policy (NEP, 2023) emphasizes inclusive education, tolerance, and diversity as key components of teacher education. It promotes global awareness and the development of skills for intercultural dialogue, aligning with the goals of international mindedness. Pakistan's Vision 2025 focuses on human resource development, including education reform that emphasizes cross-cultural understanding and global skills (Ministry of Planning, Development and Reform, 2014). The National Professional Standards for Teachers in Pakistan (2009) include components of cultural competence, critical thinking, and citizenship, which relate to intercultural competence.

The Higher Education Commission (HEC) reports that over 30% of teacher education programs have integrated content related to intercultural communication and global engagement through partnerships and curriculum reforms (Higher Education Commission, 2020). Pakistan has participated in various UNESCO programs focusing on global citizenship education (GCED) and intercultural dialogue, benefiting teacher training programs (Bano et al., 2020). Moreover, the broader framework of Sustainable Development Goal (SDG) 4.7, emphasizing the relevance of equipping future

educators with intercultural and international perspectives. Research indicates that faculty in Pakistani higher education institutions recognize the need for international mindedness but lack formal training for its implementation (Malik et al., 2024). Such policies and data provide a foundation for investigating pre-service teachers' competencies in these areas, highlighting the gap between policy and practice.

The current study focuses on Pakistan, as an emerging country, is struggling in almost all spheres of education (Government of Pakistan, 2023). There are various reasons behind the struggling state, such as rising poverty and unemployment, heavy external and domestic indebtedness, high fiscal deficit and low investment, political interference, and instability. (Sultana, 2018) (see section 1.2.2 for more details about the educational landscape of Pakistan). Despite numerous issues, the government of Pakistan is actively working towards improvement in all fields, including education. The policymakers have proposed National Education Policy-2023, which focuses on innovative learning approaches for teachers and students to improve the level of education (NEP, 2023). The literature shows a severe dearth of research investigating IM and IC among teachers and even negligible among pre-service teachers, which are the focus of the present study (Malik et al., 2024). The next part of the section provides a detailed discussion on pre-service teachers in Pakistan.

1.2.1 Pre-Services Teachers

Pre-service teachers are individuals undergoing training to become educators. They are enrolled in various teacher education programs, such as the Bachelor of Education (B.Ed.) or Master in Education programs, to equip them with the necessary knowledge and skills to enter the teaching profession (Amirali & Halai, 2021). In the case of pre-service teachers in Pakistan, this practice is usually incorporated as a vital

component of the training; programs have teaching practicums that allow trainees to get some practical experience in natural classroom settings. The development of pre-service teachers in Pakistan is essential in developing effective educators who would be able to satisfy twenty-first-century learners (Ali et al., 2023). For example, the teacher training institutes in Pakistan consider the pre-service teachers' theoretical and practical development to lead them to be prepared for the tangles of the education system (Riaz & Hassan, 2020). Most importantly, four-year B.Ed. (Hons) degree programs have been initiated to improve the problem-solving skills and critical thinking of the pre-service teachers for better practice among students (Amirali & Halai, 2021).

In Pakistan, it is important to mention that pre-service teachers face various challenges and opportunities during their training. They encounter diverse classroom dynamics and are tasked with encouraging active participation among all students, including those who may be reticent (Tanore, 2023). Furthermore, pre-service teachers often grapple with issues related to power structures and deficit models of teaching and learning, highlighting the importance of developing an anti-oppressive professional voice (Sennett, 2022). Moreover, pre-service teachers' attitudes and self-efficacy towards inclusive education are essential considerations in preparing them to create inclusive learning environments (Sharma et al., 2014).

In Pakistan, the pre-service teacher education courses, namely Primary Teaching Certificate (PTC) and Certificate in Teaching (CT) (PTC and CT), have been substituted with Associate Degree in Education (ADE), Bachelor of Science Education (B.S Ed.), and B.Ed. Honors. The objective of PTC was to train instructors for primary classes in public sector schools, including for grades 1 to 5 (Alam et al., 2023). CT, on

the other hand, focused on teaching general subjects to students in elementary classes, which covered grades 6 to 8 (Farooq et al., 2017). Nevertheless, teachers possessing these certifications have also been teaching secondary students because of lacking staff in many schools (Ingersoll, 2020). Similarly, a B.Ed. honours degree serves the similar objective of instructing first-level subjects. The Bachelor of Education (B.Ed.) and BS. Ed programs are preliminary courses designed for individuals who become secondary and higher secondary school teachers in the public sector (Basit et al., 2021). At present, these programs are offered by the Institutes of Education and Research (IERS) of both public and private sector universities, Colleges of Education, Regional Institutes of Teacher Education (RITEs), Provincial Institutes of Teacher Education (PITEs), and associated colleges (Dayan et al., 2018; Khan, 2013).

Induction is a mandatory degree in every beginner teacher education program, which allows aspiring teachers to gain practical experience in the field (Masood, 2011). During this stage of instruction, a pre-service assumes the role of a visiting teacher at a public or private school. For experienced teachers who are already trained, to improve their professional skills continuing teacher training is a program designed.

Regularly, these trainings consist of seminars, workshops, and discussion sessions on several issues of teaching methodologies organized by governmental or non-governmental entities (Burns, 2023). The master's in education (M.Ed.) is a postgraduate degree designed for individuals who are already working in the field of education. It is offered by universities that already offer undergraduate degrees and certificates in education.

1.2.2 Educational Landscape of Pakistan

Pakistan has decentralized its education system through the 18th constitutional amendment, transferring responsibility for managing education to provincial governments. Meanwhile, the Ministry of Federal Education and Professional Training continues to facilitate connections between educational institutions and the industry (GOP Finance Division, 2017). Pakistan has a total of 313,418 educational institutions of various kinds and levels. These institutions are categorized into eight distinct levels. Out of the total institutes, 73% are formal schools that are based on primary to higher secondary education. There are 14% religious schools or Deeni Madaris, 8% non-formal basic education institutes, 3% education foundations, 1% technical and vocational institutes, and degree colleges (Malik et al., 2022). Table 1.1. details the key educational indicators in Pakistan for the year 2021-22.

Table 1.1

Key Education indicators in Pakistan in the year 2021-22

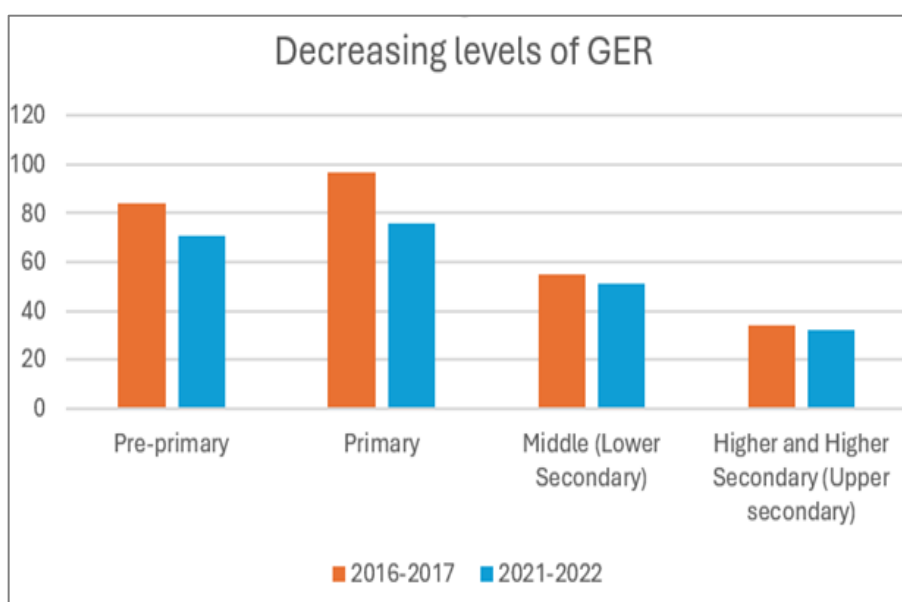
Key Education Indicators	2021-22
Total Educational Institutions	313,418
Private	137,234 (43.8%)
Public	176,184 (56.2%)
Student Enrolment	54,870,964
Private	25,511,588 (46.5%)
Public	29,359,376 (53.5%)
Total Teachers	2,139,631
Universities	220
Teacher Training Institutes	217
Gross Intake Ratio (GIR) in Primary Education	81%
The Gross Enrolment Ratio (GER) in Primary Education	76%

Source: Government of Pakistan. <https://pie.gov.pk/>

Table 1.1 also shows that Pakistan has 217 training institutes and 220 universities. The total number of 54,870,964 enrolled students working in all kinds and levels in Pakistan, while the total number of teachers in all institutions in all kinds and levels is 2,139,631 (Pakistan Institute of Education, 2022). Additionally, the Gross Intake Ratio (GIR) for primary education consists of 81% in Sindh, in which males are 81% and females are 70%. However, the GIR for the final grades of primary and middle is 35% and 55%, respectively. Similarly, the Gross Enrolment Ratio (GER) for primary education in Pakistan in the year 2021-22 remains at 76%, with a prominent decreasing rate of 51% for lower secondary and 32% for upper secondary school. Furthermore, it is important to note that there is a considerable decrease in GER at all levels, with primary level of 21% dropping from 97% in the year 2016-17 to 76% in the year 2021-22 (Pakistan Institute of Education, 2022). The graphical presentation can be seen in Figure 1.1.

Figure 1.1

Decreasing Level of Gross Enrolment Ratio



Source: Government of Pakistan

<https://pie.gov.pk/SiteImage/Downloads/PES%202021-22%20reduced.pdf>

In addition, the Effective Transition Rate (ETR) from primary to high school has reduced from 91% in 2016-17 to 90% in 2021-22. Similarly, the ETR from middle school to high school reduced from 84% in 2016-17 to 81% in 2021-22 (Pakistan Education Statistics, 2021). The decreasing rate of ETR and GER has lowered the quality and performance of the education system in Pakistan. See Table 1.2.

Table 1.2

Key Education indicators in Pakistan year of 2016-17 and 2021-22

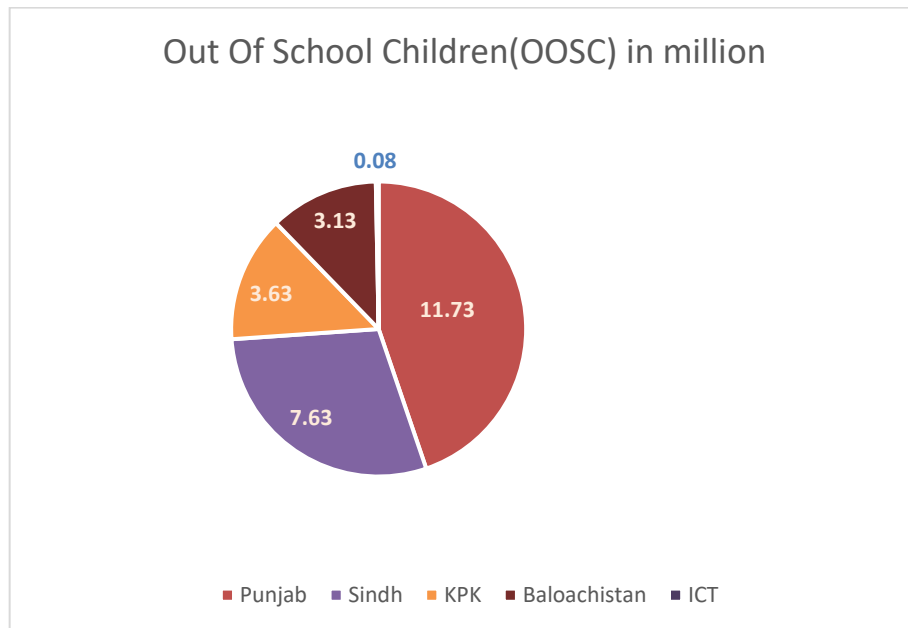
Key Indicators	2016-17	2021-22
Out of School Children (OOSC)	44%	39%
Survival Rate to Grade 5	67%	77%
Effective Transition Rate (ETR) <i>from Primary to Middle</i>	91%	90%
Effective Transition Rate (ETR) <i>Middle and Middle to High</i>	84%	81%
Pupil-Teacher Ratio (PTR) <i>Primary</i>	32	39
PTR- Lower Secondary <i>Middle</i>	21	25
PTR- Upper Secondary <i>High and Higher Secondary</i>	23	30

Source: Pakistan Education Statistics (2021)

Economic inequality significantly impacts the capacity to acquire education in Pakistan. Children belonging to the poorest sector of society face the greatest disadvantages, with a major proportion of them being OOSC at all levels of education. Figure 1.2 displays the distribution of OOSC among different provinces in Pakistan.

Figure 1.2

Out of School Children

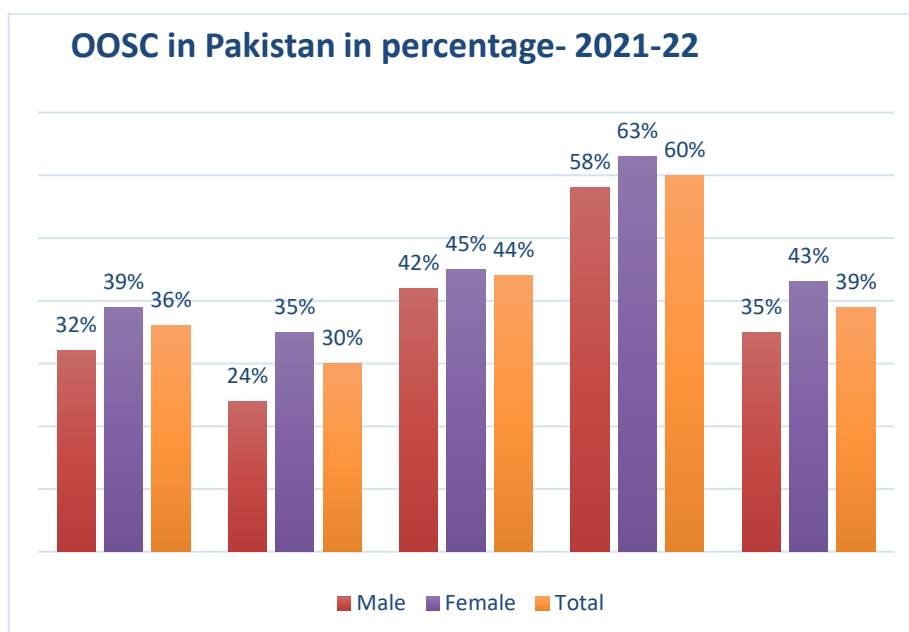


Source: Pakistan Education Statistics (2021)

Figure 1.2 shows that the percentage of OOSC in Pakistan has declined from 44% in the academic year 2016-17 to 39% in the academic year 2021-22. Although the percentage has decreased, the actual number of OOSCs has increased from 22.02 million in 2016-17 to 26.21 million in 2021-22. This is mainly due to the population growing faster than the decline in OOSC. Additionally, Figure 1.3 depicts the distribution of OOSC based on gender for the academic year 2021-22.

Figure 1.3

Out of School Children



Source: Pakistan Education Statistics (2021)

Pakistan is also struggling with social, economic, and educational issues, especially education, which grapples with limited resources (Khan, 2019). It is a highly recognised fact that education plays a vital role in achieving economic growth and income, and educational disparity is directly linked with income disparity. It is a backbone for inclusive growth (Bawazir et al., 2021). In this manner, poverty and income inequality are interconnected and are negatively linked with human development (Hayakawa & Venieris, 2019).

Many problems surround the education system in Pakistan and there is a need to address them one by one. Ahmad et al. (2014) discussed different issues which were faced by the education system in Pakistan, which included a lack of uniformity, education without direction, outdated curricula, a lack of quality teachers, a lack of professional development for teachers, alarming dropouts, poor supervisory standards, interference in the education system, and a low budget for the education system. The

Education budget in Pakistan has traditionally been lower than the ones in developed nations since the times of history. According to UNESCO, in 2019, Pakistan's permanent contribution to education was only 2.6 per cent of its GDP, which is much lower than the advisable 4-6 per cent for developing countries.

As Shahzad et al. (2021) have pointed out, the unavailability of quality teachers is a pivotal dilemma of the education system in Pakistan. They mention that the level of education in Pakistan has been deteriorating because of various reasons, one of which is not enough well-trained and qualified teachers who inculcate IM and IC in students. On the other hand, Rashid and Ahmad's research (2020) confirms that poor-quality teachers play a critical role in Pakistan's education system. Khan and Shaikh (2021) conclude that there is deficient training and development of university faculty members, which has led to obsolete teaching techniques and poor curriculum development. It has caused the absence of these thinking skills, making the students in the future lack analytical skills and problem-solving abilities. Ali and Naqvi (2017) continue by stating that professional development programs were scarce; thus, low job satisfaction, commitment, and motivation among teachers became public. Therefore, high attendance rates, low spirits and negative impact on the students are the types of development.

1.3 The Problem Statement

Globalization and the increasing interconnectedness of societies have intensified the demand for education systems that foster international mindedness and intercultural competence (Malik et al., 2024). These concepts are pivotal in preparing students for effective participation in diverse cultural settings. Universities, as centres of knowledge creation and skill development, play a critical role in equipping pre-

service teachers with these competencies. However, despite growing recognition of IM and IC as essential graduate attributes, their integration into teacher education programs remains insufficiently explored, particularly in Pakistani universities, where cultural diversity and global engagement are increasingly relevant (Nopas & Kerdsomboon, 2024).

Pre-service teachers in Pakistan are expected to navigate complex socio-cultural landscapes, both within and beyond classroom settings (Malik et al., 2024). The disparities in education are particularly pronounced in pre-service teacher education. Gender inequities and varying levels of seniority among pre-service teachers reflect broader systemic issues (Burakgazi et al., 2020). If there is little or no difference between junior and senior students, it highlights a significant gap in the curriculum and teaching strategies, reinforcing the need for targeted interventions. Male and female pre-service teachers, along with junior and senior students, encounter differing challenges in acquiring International Mindedness (IM) and Intercultural Competence (IC), critical components for navigating diverse classrooms in a globalized world.

International Mindedness and Intercultural Competence are pivotal for fostering globally competent educators who can create inclusive, culturally sensitive learning environments (Malik et al., 2024). IM entails awareness of global issues, diverse perspectives, and interconnectedness, while IC involves effective communication and interaction across cultures (Chen, 2023). However, research highlights Pakistani pre-service teachers' low intercultural willingness to communicate and high ethnocentrism, underscoring the need for targeted interventions (Yousaf et al., 2022). Gender and seniority differences further compound these challenges, as

male and female pre-service teachers often have disparate access to intercultural experiences and professional development opportunities.

Gendered disparities in teacher education impact IM and IC acquisition (Zhang, 2024). Female pre-service teachers in the context of Pakistan, often constrained by sociocultural norms, have fewer opportunities for cultural immersion compared to their male counterparts. Similarly, junior pre-service teachers, with limited exposure to diverse teaching environments, may struggle more than their senior peers in developing intercultural skills. These disparities necessitate a nuanced understanding of how gender and seniority influence the development of IM and IC among pre-service teachers in Pakistan (Akram et al., 2022).

The Pakistani education system's reliance on rote memorization and inadequate teacher training fails to equip educators with the critical thinking and intercultural skills needed for modern classrooms (Sain, 2023). The absence of IM and IC assessments in curricula and teacher training programs exacerbates this gap (Rokos, 2024). Additionally, the lack of reflective practices and professional growth opportunities for teachers limits their ability to foster global competencies in students (Tichnor-Wagner et al., 2019).

Reports reveal alarming deficits in teacher quality, with many educators lacking basic English proficiency and pedagogical skills (Ingersoll, 2020). These deficiencies hinder their ability to engage with diverse student populations effectively. Moreover, institutional frameworks often neglect the integration of IM and IC, leaving pre-service teachers ill-prepared for multicultural teaching scenarios.

While studies emphasize the importance of IM and IC, research on their development in pre-service teachers, particularly in Pakistan, remains sparse. Existing literature rarely addresses the intersection of gender and seniority in shaping these competencies (Malik et al., 2024). This study aims to fill this gap by investigating the IM and IC levels of male and female pre-service teachers across junior and senior cohorts in Sindh, Pakistan.

This research seeks to provide actionable insights for policymakers and educators to enhance IM and IC among pre-service teachers. By identifying gender- and seniority-specific challenges, the study will inform targeted interventions to foster globally competent educators, ultimately contributing to a more inclusive and effective education system in Pakistan.

1.4 Research Objectives

RO1: To investigate how pre-service teachers demonstrate the dimensions of international mindedness in public universities of Pakistan.

RO2: To investigate if there is any statistically significant difference in the overall mean score of international mindedness between junior and senior pre-service teachers in the public universities of Pakistan.

RO2a: To investigate whether there is any statistically significant difference in the mean scores of five dimensions of international mindedness between junior and senior pre-service teachers in the public universities of Pakistan.

RO3: To determine if there is any statistically significant difference in the overall mean score of international mindedness between male and female pre-service teachers in the public universities of Pakistan.

- RO3a:** To determine if there is any difference between male and female pre-service teachers of the public universities of Pakistan on the five dimensions (Responsibility, Cultural pluralism, Efficacy, Global centrism, and Interconnectedness) of international mindedness
- RO4:** To explore how pre-service teachers demonstrate the dimensions of intercultural competence in public universities of Pakistan.
- RO5:** To investigate whether there is any statistically significant difference in the overall mean score of intercultural competence between junior and senior pre-service teachers in the public universities of Pakistan.
- RO5a:** To determine if there is any statistically significant difference in the mean scores of six dimensions of intercultural competence between junior and senior year pre-service teachers in the public universities of Pakistan.
- RO6:** To investigate if there is any statistically significant difference in the overall mean score of intercultural competence between male and female pre-service teachers in the public universities of Pakistan.
- RO6a:** To investigate if there is any difference between male and female pre-service teachers of the public universities of Pakistan on the six dimensions (Cognitive Knowing, Cognitive Knowledge, Intrapersonal Identity, Intrapersonal Affect, Interpersonal Social Responsibility, Interpersonal Social Interaction) of Intercultural competence.
- RO7:** To investigate if there is any relationship between international mindedness and intercultural competence of pre-service teachers in the public universities of Pakistan.

RO8: To investigate if there is any relationship between the dimensions of international mindedness and intercultural competence in the public universities of Pakistan.

RO9: To explore pre-service teachers' understanding of international mindedness.

RO10: To explore pre-service teachers' understanding of intercultural competence.

1.5 Research Questions

The specific research questions below were elaborated to structure the research processes, including data collection and analyses.

RQ1: To what extent pre-service teachers demonstrate the dimensions of international mindedness in the public universities of Pakistan?

RQ2: Is there any difference between junior and senior pre-service teachers of public universities in Pakistan in terms of international mindedness?

RQ2a: Is there any difference between junior and senior pre-service teachers of the public universities of Pakistan on the five dimensions (Responsibility, Cultural pluralism, Efficacy, Global centrism, and Interconnectedness) of international mindedness?

RQ3: Is there any difference between male and female pre-service teachers of public universities in Pakistan in terms of international mindedness?

RQ3a: Is there any difference between male and female pre-service teachers of the public universities of Pakistan on the five dimensions (Responsibility, Cultural pluralism, Efficacy, Global centrism, and Interconnectedness) of international mindedness?

RQ4: To what extent pre-service teachers demonstrate the dimensions of intercultural competence in the public universities of Pakistan?

- RQ5:** Is there any difference between junior and senior pre-service teachers of public universities in Pakistan in terms of intercultural competence?
- RQ5a:** Is there any difference between junior and senior pre-service teachers of the public universities of Pakistan on the six dimensions (Cognitive-Knowing, Cognitive-Knowledge, Intrapersonal-Identity, Intrapersonal-Affect, Interpersonal-Social Responsibility, Interpersonal-Social Interaction) of intercultural competence?
- RQ6:** Is there any difference between male and female pre-service teachers of public universities in Pakistan in terms of intercultural competence?
- RQ6a:** Is there any difference between male and female pre-service teachers of the public universities of Pakistan on the six dimensions (Cognitive Knowing, Cognitive Knowledge, Intrapersonal Identity, Intrapersonal Affect, Interpersonal Social Responsibility, Interpersonal Social Interaction) of Intercultural competence?
- RQ7:** Is there any relationship between pre-service teachers' international mindedness and intercultural competence in the public universities of Pakistan?
- RQ8:** Is there any relationship between the dimensions of international mindedness and intercultural competence in the public universities of Pakistan?
- RQ9:** What is pre-service teachers' understanding of international mindedness?
- RQ10:** What is pre-service teachers' understanding of intercultural competence?

1.6 Hypotheses

In statistical analysis, hypotheses are fundamental in testing assumptions about populations or processes. The present study used alternative hypothesis to test assumptions.

- H₁. There is a statistically significant difference in the overall mean score of international mindedness between junior and senior pre-service teachers in the public universities of Pakistan.
- H₂. There is a statistically significant difference in the mean scores of five dimensions of international mindedness between junior and senior pre-service teachers in the public universities of Pakistan.
- H₃. There is a statistically significant difference in the overall mean score of international mindedness between male and female pre-service teachers in the public universities of Pakistan.
- H₄. There is a statistically significant difference in the mean score of the five dimensions of international mindedness between male and female pre-service teachers in the public universities of Pakistan.
- H₅. There is a statistically significant difference in the overall mean score of intercultural competence between junior and senior pre-service teachers in the public universities of Pakistan.
- H₆. There is a statistically significant difference in the mean scores of six dimensions of intercultural competence between junior and senior pre-service teachers in the public universities of Pakistan.
- H₇. There is a statistically significant difference in the overall mean score of intercultural competence between male and female pre-service teachers in the public universities of Pakistan.

- H₈. There is a statistically significant difference in the mean score of the six dimensions of intercultural competence between male and female pre-service teachers in the public universities of Pakistan.
- H₉. There is a positive relationship between pre-service teachers' international mindedness and intercultural competence in the public universities of Pakistan.
- H₁₀. There is a positive relationship between the dimensions of international mindedness and intercultural competence in the public universities of Pakistan.

1.7 Significance of Study

The current study has provided significant findings that improve the skills of pre-service teachers by investigating the IM (Harwood & Bailey, 2012; Hill, 2007) and IC (Romijn et al., 2020) in teacher education programs. It will help in understanding the abilities and competencies of future teachers in different cultures (Dayan et al., 2018) in Sindh, Pakistan. Additionally, it highlighted the role of gender and senior or junior pre-service teachers in building international-mindedness and intercultural competence. The study contributes to both theoretical understanding and practical applications in teacher education and intercultural competence development.

From a theoretical perspective, the Sociocultural theory and Contact Hypothesis theory's potential to foster positive intergroup attitudes and behaviours through structured interpersonal interactions among pre-service teachers lies in its application to the study of international mindfulness (IM) and intercultural competence (IC).

Allport's (1954) hypothesis proved the most influential by specifying the critical situational conditions for intergroup contact to reduce prejudice. His hypothesis has received extensive attention both for its rare theoretical status and policy importance (Pettigrew, 1971). Allport's (1954) theory has had the greatest impact by outlining the crucial situational circumstances that lead to a decrease in prejudice through intergroup experience. The theory has received significant attention due to its unique theoretical position and its importance in policy (Pettigrew, 1971). Curiously, despite its focus on direct human connection, social psychology never breaks down situations into their fundamental elements. Allport's attempt stands out as a notable anomaly. Pettigrew (1975) has demonstrated the practical utility of this concept in distinguishing between racial integration and combination in educational contexts.

Allport (1954) proposed the intergroup Contact Hypothesis and argued that the beneficial impacts of intergroup contact are only observed when four important criteria are present: equal status of the groups in criteria, shared goals, teamwork between the groups, and the confirmation of authorities. The study's objective is to initiate significant communications among pre-service teachers from different cultural backgrounds with the help of this theory.

The study has used the requirements specified by the Contact Hypothesis theory. Firstly, it is important to create a sense of equal standing among pre-service teachers in the educational setting. Additionally, it facilitates collaboration and mutual goals, such as joint projects or learning from diverse cultures events. Furthermore, it supports interactions and teamwork among individuals from different cultural