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RESEARCH ARTICLE

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The Attitudes and Values (Interpersonal Competence) as a Dimension of Global Competence and its Relationship with Academic Motivation in Higher Education

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Abstract: Global competence has become an important aim of higher education. Its attitudes and values dimension, which includes openness to other cultures, willingness to interact with people from different backgrounds, and respect for other perspectives, may be closely tied to the reasons for which students engage in learning. Guided by Self-Determination Theory, this study examined the relationship between the attitudes and values dimension of global competence and three forms of academic motivation: intrinsic motivation, extrinsic motivation and amotivation. A quantitative correlational design was used with 1,200 undergraduate students from the Education departments of three universities (two public and one private) in Lahore, Pakistan. Attitudes and values were measured with 11 items from the Global Competence Scale (Liu et al., 2020), and academic motivation with 20 items from the Academic Motivation Scale (Vallerand et al., 1992). Pearson correlations showed that attitudes and values were strongly and positively related to intrinsic motivation ($r = .586, p < .001$) and extrinsic motivation ($r = .560, p < .001$). The correlation with amotivation was also positive but negligible ($r = .072, p = .012$), which is contrary to theoretical expectations. Students who were more open to other cultures therefore reported stronger motivation of both kinds, while the very small positive link with amotivation calls for further examination. The findings suggest that opportunities for intercultural engagement in teacher education may support students' motivation to learn, although the correlational design does not allow causal conclusions.

Keywords: Global Competence, Attitudes and Values, Academic Motivation, Self-Determination Theory, Teacher Education, Pakistan

Introduction

Global competence is becoming more relevant in higher education because students need the knowledge, skills and attitudes required to interact effectively with people from different cultures. It is commonly described as having three components: knowledge and understanding, skills, and attitudes and values (Liu et al., 2020; OECD, 2018). The attitudes and values dimension concerns openness to other cultures, the desire to interact with people from other cultures and respect for other views. Studies in teacher education have stressed the need to prepare students and teachers to recognise cultural diversity and to value other viewpoints (Kerkhoff & Cloud, 2020; Parmigiani et al., 2022).

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Academic motivation is another major factor in students' learning experiences. It refers to the reasons for which students engage in academic activities and includes intrinsic motivation, extrinsic motivation and amotivation (Vallerand et al., 1992). This study brings the two areas together by asking whether students' openness and respect toward other cultures are related to the kind of motivation with which they approach their studies.

Literature Review

Global Competence and Its Attitudes and Values Dimension

Global competence has been defined in several ways, but most definitions agree that it involves more than knowledge about other countries. Hunter et al. (2006) describe a globally competent person as someone with an open mind who actively seeks to understand the cultural norms and expectations of others and uses this understanding to interact and work effectively outside their own environment. The OECD (2018) framework, which guided the PISA assessment of global competence, likewise combines knowledge, skills, attitudes and values, and identifies openness toward people from other cultures, respect for cultural otherness and global-mindedness as its core attitudes. In Deardorff's (2006) process model of intercultural competence, attitudes of respect, openness and curiosity form the foundation on which knowledge, skills and effective behaviour are built. Liu et al. (2020) developed the Global Competence Scale for graduate students in China. Its attitudes and values dimension covers willingness to engage with other cultures, respect for and appreciation of cultural differences, and a sense of one's own cultural identity and values.

Academic Motivation from a Self-Determination Perspective

Self-Determination Theory (SDT) distinguishes types of motivation by the degree to which behaviour is self-determined (Deci & Ryan, 2000; Ryan & Deci, 2000). Intrinsic motivation refers to engaging in an activity for its own sake, out of interest and enjoyment. Extrinsic motivation refers to engaging in an activity for a separable outcome and ranges from relatively autonomous to controlled forms: identified regulation (acting because the activity is personally valued), introjected regulation (acting to avoid guilt or to maintain self-worth) and external regulation (acting to obtain rewards or avoid punishment). Amotivation is the absence of any intention to act. Vallerand et al. (1992) operationalised these distinctions in the Academic Motivation Scale (AMS), which has been widely used with university students and has shown satisfactory reliability and validity with Pakistani university students (Khan et al., 2024). A meta-analysis of SDT research in education found that intrinsic motivation and identified regulation were associated with positive outcomes such as engagement, achievement and well-being, whereas external regulation and amotivation were associated with less favourable outcomes (Howard et al., 2021). The type of motivation, and not only its amount, therefore matters for students' learning (Guay, 2022).

Intercultural Attitudes and Motivation

Several lines of research suggest that openness toward other cultures and academic motivation are related. Among personality traits, openness to experience has been positively associated with intrinsic motivation among college students (Komarraju et al., 2009), which suggests that curiosity about new ideas and curiosity about other cultures may share a common basis. In second language learning, Yashima (2002) found that an "international posture", which includes interest in international affairs and willingness to interact with people from other cultures, was related to students' motivation to learn English. Noels et al. (2000) showed that more self-determined orientations for language learning were linked to greater effort and persistence, while amotivation was linked to anxiety and an intention to discontinue. Teacher education studies also indicate that experiences which develop global competence, such as international collaboration and exposure to diverse perspectives, can increase student teachers' engagement with their professional learning (Kerkhoff & Cloud, 2020; Parmigiani et al., 2022). Taken together, these findings suggest that students who value cultural diversity may be more interested in learning for its own sake and more likely to see their studies as personally meaningful.

Research Gap

Despite these indications, few studies have examined the attitudes and values dimension of global competence directly in relation to the different forms of academic motivation. Most research on global competence has concentrated on its definition and assessment or on teacher education programmes in Europe, North America and East Asia, while research on academic motivation in Pakistan has focused mainly on its measurement and its links with achievement. Evidence from Pakistani undergraduates, and especially from prospective teachers in Education departments who will be expected to prepare future generations for a diverse world, remains limited. This study addresses that gap.

Statement of the Problem

It is not known whether undergraduate students in Pakistan who are more open to cultural differences, more willing to interact with people from different backgrounds and more respectful of diverse perspectives also differ in their intrinsic motivation, extrinsic motivation and amotivation. Answering this question can help teacher education programmes decide whether activities that develop intercultural attitudes may also support students' motivation to learn. This study therefore examined the relationships between the attitudes and values dimension of global competence and the three forms of academic motivation among undergraduate students of Education departments in Lahore.

Research Objectives

The general objective was to investigate the relationship between the attitudes and values dimension of global competence and the academic motivation of undergraduate students. The specific objectives were to:

1. investigate the correlation between the attitudes and values dimension of global competence and intrinsic motivation;
2. investigate the correlation between the attitudes and values dimension of global competence and extrinsic motivation; and
3. investigate the correlation between the attitudes and values dimension of global competence and amotivation.

Research Hypotheses

H₀₁: There is no significant relationship between the attitudes and values dimension of global competence and intrinsic motivation among undergraduate students.

H₀₂: There is no significant relationship between the attitudes and values dimension of global competence and extrinsic motivation among undergraduate students.

H₀₃: There is no significant relationship between the attitudes and values dimension of global competence and amotivation among undergraduate students.

Theoretical Framework

This study draws on two perspectives: the framework of 21st-century competencies and Self-Determination Theory. The 21st-century competencies framework focuses on the knowledge, skills, attitudes and values required for effective learning and participation in an interconnected world (Foster & Piacentini, 2023; OECD, 2018). The present study concentrates on the attitudes and values dimension of global competence, namely openness to cultural differences, willingness to interact with people from different cultural backgrounds and respect for diverse perspectives, as measured by items adapted from the Global Competence Scale (Liu et al., 2020).

Self-Determination Theory explains why people engage in activities and distinguishes intrinsic motivation, the forms of extrinsic motivation and amotivation (Ryan & Deci, 2000, 2020). According to SDT, motivation becomes more self-determined when the basic psychological needs for autonomy, competence and relatedness are satisfied. The two perspectives can be linked as follows. Openness and curiosity toward

other cultures reflect a general orientation toward exploring the new and unfamiliar, which is the defining feature of intrinsic motivation to know. Respect for, and willingness to interact with, people from different backgrounds may also support relatedness in diverse classrooms. Students who value cross-cultural learning, international study and contact with foreign scholars may further see their studies as a route to personally valued goals, which corresponds to identified regulation.

On this basis, the attitudes and values dimension was expected to be positively related to intrinsic motivation and to the more autonomous forms of extrinsic motivation, and negatively related to amotivation, since amotivated students see little purpose in their studies. The study examined these relationships through correlation and does not test cause-and-effect relationships.

Methodology

Research Design

A quantitative correlational design was used to investigate the relationships between the attitudes and values dimension of global competence and academic motivation among undergraduate students. Data were collected through a structured questionnaire. The design allows associations between variables to be examined but does not allow conclusions about cause and effect.

Sample and Sampling Technique

The population consisted of undergraduate students of Education departments in universities of Lahore, Pakistan, recognised by the Higher Education Commission (HEC). Three universities, two in the public sector and one in the private sector, were selected through purposive sampling, and students were recruited through convenience sampling on the basis of their availability and willingness to participate. In all, 1,250 questionnaires were distributed and 1,200 were retained for analysis, a usable response rate of 96%.

Ethical Considerations

Permission for data collection was obtained from the participating universities. The purpose of the study was explained to the participants, and informed consent was obtained before the questionnaires were administered. Participation was voluntary, and participants were assured that their responses would be confidential and used for research purposes only, and that they could decline to participate or withdraw at any stage.

Research Instruments

The questionnaire was administered in English and had two sections. The first section measured the attitudes and values dimension of global competence with 11 items from the Global Competence Scale developed by Liu et al. (2020) for graduate students in China. The items cover willingness to interact with people from other cultures (items 1 to 5), respect for, understanding of and appreciation of other cultures (items 6 to 8), and identification with one's own culture, acceptance of other worldviews and a sense of one's value to one's country and society (items 9 to 11). Items were rated on a five-point scale (1 = strongly disagree to 5 = strongly agree). The wording of some items was modified to make them clearer and more appropriate for undergraduate students while preserving their meaning.

The second section measured academic motivation with 20 items from the college version of the Academic Motivation Scale (Vallerand et al., 1992, 1993). The items were drawn from five of its seven subscales: intrinsic motivation to know (items 1 to 4), identified regulation (items 5 to 8), introjected regulation (items 9 to 11 and 13), external regulation (items 12 and 14 to 16) and amotivation (items 17 to 20). Intrinsic motivation was represented by the four intrinsic motivation to know items, extrinsic motivation by the mean of the 12 identified, introjected and external regulation items, and amotivation by the four amotivation items. The original seven-point response format was adapted to the same five-point scale used in the first section, and the wording of some items was adjusted for undergraduate students while keeping the intended meaning.

Reliability of the Instruments

Internal consistency was assessed with Cronbach’s alpha (Table 3). The 11-item attitudes and values scale had an alpha of .823. The four intrinsic motivation items had an alpha of .678, slightly below the commonly used criterion of .70 but generally considered acceptable for a scale of only four items. The 12 extrinsic motivation items had an alpha of .841, and the four amotivation items had an alpha of .781.

Data Analysis

Data were analysed with IBM SPSS Statistics version 25. Descriptive statistics were calculated for each item and scale, and item means were interpreted in relation to the midpoint (3.00) of the five-point scale. Pearson product-moment correlations were used to test the relationships between the attitudes and values dimension and intrinsic motivation, extrinsic motivation and amotivation. Correlation coefficients were interpreted using Cohen’s (1988) guidelines, under which values of about .10, .30 and .50 indicate small, medium and large relationships, and 95% confidence intervals were calculated with Fisher’s *z* transformation. A *p* value below .05 was considered statistically significant.

Results

Descriptive Statistics

Table 1

Descriptive Statistics for the Attitudes and Values Items (N = 1,200)

Item	M	SD
1. I would like to spend time and energy interacting with foreigners and establishing contacts.	3.89	1.05
2. I would like to experience life and culture in other countries (such as through tourism).	4.06	0.99
3. I would like to take the risk to experience cross-cultural learning and personal development (such as through overseas study and work).	3.92	1.04
4. I would like to go abroad and experience foreign countries’ academic and research environments.	4.05	1.06
5. I would like to consult foreign scholars in my areas of interest at international academic lectures and report sessions.	3.80	1.15
6. When communicating with foreigners, I try to respect their cultures and values.	4.38	0.88
7. When communicating with foreigners, I try to understand their cultures and values.	4.22	0.89
8. When communicating with foreigners, I try to appreciate their cultures and values.	4.16	0.96
9. I identify with my own country’s culture and values.	4.30	0.93
10. I believe that my worldview is one of many equally valid worldviews.	3.94	0.96
11. I consider myself valuable to my country and society.	3.99	1.13

Note. Items were rated from 1 (strongly disagree) to 5 (strongly agree).

As Table 1 shows, the item means for the attitudes and values dimension ranged from 3.80 to 4.38, and all 11 items were above the scale midpoint. The highest mean was for respecting the cultures and values of people from other countries when communicating with them (*M* = 4.38, *SD* = 0.88), followed by identifying with one’s own country’s culture and values (*M* = 4.30, *SD* = 0.93) and understanding (*M* = 4.22, *SD* = 0.89) and appreciating (*M* = 4.16, *SD* = 0.96) other cultures. The lowest mean was for consulting foreign scholars at international academic lectures and report sessions (*M* = 3.80, *SD* = 1.15). Students therefore expressed respect for other cultures more strongly than a readiness to engage with them in academic settings.

Table 2*Descriptive Statistics for the Academic Motivation Items (N = 1,200)*

Item	<i>M</i>	<i>SD</i>
Intrinsic motivation to know		
1. For the pleasure I experience when I discover new things never seen before.	4.10	0.94
2. For the pleasure that I experience in broadening my knowledge about subjects which appeal to me.	3.85	0.95
3. Because I experience pleasure and satisfaction while learning new things.	3.95	0.98
4. Because my studies allow me to continue to learn about many things that interest me.	3.92	1.04
Identified regulation		
5. Because I think that education will help me better prepare for the career I have chosen.	4.25	0.96
6. Because eventually it will enable me to enter the job market in a field that I like.	3.93	0.97
7. Because this will help me make a better choice regarding my career orientation.	3.96	0.96
8. Because I believe that my education will improve my competence as a worker.	3.90	1.14
Introjected regulation		
9. To prove to myself that I am capable of completing my diploma.	4.13	0.91
10. Because when I succeed in school, I feel important.	3.93	0.92
11. To show myself that I am an intelligent person.	3.78	1.05
13. Because I want to show myself that I can succeed in my studies.	3.91	1.07
External regulation		
12. Because I need at least a high school diploma to find a high-paying job later on.	3.87	1.11
14. To obtain a more prestigious job later on.	3.72	1.03
15. Because I want to have “the good life” later on.	4.01	1.06
16. To have a better salary later on.	3.88	1.17
Amotivation		
17. Honestly, I don’t know; I really feel that I am wasting my time in university.	2.81	1.44
18. I once had good reasons for going to university; however, now I wonder whether I should continue.	2.66	1.23
19. I can’t see why I go to university, and frankly, I couldn’t care less.	2.95	1.31
20. I don’t know; I can’t understand what I am doing in school.	3.07	1.39

Note. Items are numbered as in the questionnaire and grouped by subscale. Items were rated from 1 (strongly disagree) to 5 (strongly agree).

Table 2 shows that the four intrinsic motivation items had means from 3.85 to 4.10. The 12 extrinsic motivation items had means from 3.72 to 4.25, with the highest mean for the belief that education helps prepare students for their chosen careers (item 5, $M = 4.25$, $SD = 0.96$). Within the extrinsic items, the mean was 4.01 for identified regulation, 3.94 for introjected regulation and 3.87 for external regulation. The four amotivation items had lower means, from 2.66 to 3.07, and larger standard deviations (1.23 to 1.44). Means this close to the midpoint indicate that a considerable proportion of students partly agreed with statements such as “I really feel that I am wasting my time in university,” a finding that deserves attention in its own right.

Table 3*Scale-Level Descriptive Statistics and Reliability (N = 1,200)*

Variable	Items	<i>M</i>	<i>SD</i>	α
Attitudes and values	11	4.06	0.61	.823
Intrinsic motivation	4	3.96	0.70	.678
Extrinsic motivation	12	3.94	0.63	.841
Amotivation	4	2.87	1.05	.781

Students reported generally positive attitudes and values toward other cultures ($M = 4.06$, $SD = 0.61$), and their intrinsic motivation ($M = 3.96$, $SD = 0.70$) and extrinsic motivation ($M = 3.94$, $SD = 0.63$) were also well above the scale midpoint (Table 3). Amotivation had a mean close to the midpoint ($M = 2.87$, $SD = 1.05$) and the largest standard deviation, indicating that students differed considerably in the extent to which they questioned the value of their studies.

Relationships Between Attitudes and Values and Academic Motivation

Table 4

Pearson Correlations Between the Attitudes and Values Dimension and the Three Forms of Academic Motivation ($N = 1,200$)

Attitudes and values with	r	95% CI	p	r ²
Intrinsic motivation	.586	[.548, .622]	< .001	.34
Extrinsic motivation	.560	[.520, .598]	< .001	.31
Amotivation	.072	[.016, .128]	.012	.01

Note. CI = confidence interval; df = 1198.

Research objective 1

Investigate the correlation between the attitudes and values dimension of global competence and intrinsic motivation of undergraduate students.

Research hypothesis 1.1

H₀₁: There is no significant relationship between the attitudes and values dimension of global competence and intrinsic motivation among undergraduate students

Table 4

Variables	N	R	P
Attitudes and Intrinsic motivation	1200	0.586	<.001

Table 4 displays the relationship between attitudes and intrinsic motivation among undergraduate students; correlation analysis was used to determine the relationship between the two variables. The correlation showed a strong relationship. Accordingly, the null and alternative hypotheses are rejected and accepted, respectively, as the research hypothesis proposes a significant relationship between attitudes and intrinsic motivation among undergraduate students.

Pearson correlation analysis was conducted to determine the relationship between attitudes and extrinsic motivation among undergraduate students, thus complying with Research Objective

Research objective 2

Investigate the correlation between the attitudes and values dimension of global competence and extrinsic motivation of undergraduate students.

Research hypothesis 2.1

H₀₂: There is no significant relationship between the attitudes and values dimension of global competence and extrinsic motivation among undergraduate students.

Table 5

Variables	N	R	P
Attitudes and Extrinsic motivation	1200	0.560	< .001

Table 5 shows the relationship was investigated using correlation analysis to determine the relationship between attitudes and extrinsic motivation in undergraduate students. The review showed a significant relationship. As such, the research hypothesis stating that there is a significant correlation between attitudes and extrinsic motivation in cases of undergraduate students is accepted, and the null hypothesis is rejected. Pearson correlation analysis was conducted to determine the relationship between attitudes and amotivation among undergraduate students.

Research objective 3

Investigate the correlation between the attitudes and values dimension of global competence and amotivation of undergraduate students.

Research hypothesis 3.1

H₀₃: There is no significant relationship between the attitudes and values dimension of global competence and amotivation among undergraduate students.

Table 6

Variables	N	r	P
Attitudes and Amotivation	1200	0.072	.012

Table 6 shows that the correlation analysis was used to determine how attitudes and amotivation were related in undergraduate students. The significance of the relationship was not found. Therefore, the null hypothesis is accepted, and the research hypothesis is rejected because the values are significant, indicating there is an important connection among the attitudes as well as amotivation in undergraduate students.

Table 4 shows that the attitudes and values dimension had a strong positive correlation with intrinsic motivation, $r(1198) = .586, p < .001, 95\% \text{ CI } [.548, .622]$. H₀₁ was therefore rejected. Students with more positive attitudes and values toward other cultures reported stronger intrinsic motivation, and the two variables shared about 34% of their variance. The correlation with extrinsic motivation was of similar size, $r(1198) = .560, p < .001, 95\% \text{ CI } [.520, .598]$, so H₀₂ was also rejected. The correlation with amotivation was positive and statistically significant but negligible in size, $r(1198) = .072, p = .012, 95\% \text{ CI } [.016, .128]$. H₀₃ was rejected on statistical grounds, but the two variables shared less than 1% of their variance, and the result should not be over-interpreted.

Discussion

The attitudes and values dimension of global competence showed a strong positive correlation with intrinsic motivation ($r = .586$). Students who were more open to cultural differences and more willing to interact with people from other cultures also reported greater enjoyment of learning and discovering new things. This finding is consistent with Self-Determination Theory, which identifies curiosity and interest as the core of intrinsic motivation (Ryan & Deci, 2000), and with evidence that openness to experience is related to intrinsic academic motivation among college students (Komarraju et al., 2009). It also parallels research in language learning, where students’ international posture has been linked to their motivation to learn (Yashima, 2002). A general disposition toward exploring the unfamiliar may thus underlie both openness to other cultures and the desire to learn for its own sake. The correlational design, however, does not show whether one of these variables influences the other.

Extrinsic motivation was almost as strongly related to the attitudes and values dimension ($r = .560$). In this study, extrinsic motivation combined identified, introjected and external regulation, which SDT treats as different forms of motivation (Deci & Ryan, 2000). The identified regulation items, which concern preparing for a chosen career and improving one’s competence, had the highest means among the extrinsic items, and several attitudes and values items refer to studying, working or experiencing academic environments abroad.

Part of the relationship may therefore reflect students' career-related goals and the personal value they place on education rather than external pressure. Analysing identified, introjected and external regulation separately would show whether the relationship is driven mainly by the more autonomous form of extrinsic motivation, as SDT would predict.

The correlation between the attitudes and values dimension and amotivation was positive but negligible ($r = .072$). This result is contrary to theoretical expectation, because SDT and previous research suggest that amotivation should be negatively related to positive orientations toward learning (Howard et al., 2021; Noels et al., 2000). Two features of the data are relevant. First, the amotivation items had means close to the scale midpoint and large standard deviations, which is unusual for samples of university students. Second, the attitudes and values dimension was related almost equally to intrinsic and extrinsic motivation and slightly positively to amotivation, a pattern that can arise when some respondents tend to agree with statements regardless of their content (Podsakoff et al., 2003). Difficulty in understanding some English items may also have played a part. With a sample of 1,200, even a very small correlation reaches statistical significance, and the practical meaning of this coefficient is close to zero. Overall, the attitudes and values dimension was clearly related to intrinsic and extrinsic motivation but not meaningfully related to amotivation.

Conclusion and Recommendations

This study examined how the attitudes and values dimension of global competence is related to academic motivation among undergraduate Education students in Lahore. Students who were more open to other cultures, more willing to interact with people from different backgrounds and more respectful of diverse perspectives reported stronger intrinsic and extrinsic motivation, while the relationship with amotivation was negligible. The findings suggest that intercultural attitudes and motivation to learn go together and may be fostered together within teacher education.

Higher education institutions may therefore offer more opportunities for students to interact with people of other cultures, consider different points of view and become aware of cultural differences, for example through international collaborative projects, virtual exchanges and the inclusion of global perspectives in course content. Because a substantial number of students showed some degree of amotivation, universities should also identify students who question the value of their studies and offer them academic advising and support. Future research should examine the separate forms of extrinsic motivation, confirm the factor structure of both instruments with Pakistani undergraduates, include students from other disciplines and universities, and use longitudinal or experimental designs to test whether developing global competence leads to changes in motivation.

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