

## Teacher-Class Relationship in Emotional Intelligence and Academic Performance: A Mediation Analysis

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### Abstract

*In higher education, teacher class relationship is considered as an imperative element which plays a substantial role in emotional intelligence and academic Performance of the students. Therefore, the current study intended to examine the teacher- class relationship as a mediating factor in emotional intelligence and academic performance of the students at university level. Descriptive research design was used for the present study. By following the quantitative research method, sample of 320 students and 30 university teachers was selected from four faculties (Faculty of Agriculture, Faculty of Medical and Health Sciences, Faculty of Arts and Humanities and Faculty of Social Sciences) of university of Sargodha through convenience sampling method. Researcher collected data through Google form by using two adopted questionnaires. The results of the current study demonstrated that teacher-class relationship had an insignificant mediating role in relation with emotional intelligence and academic performance of the students. On the basis of obtained results, it is recommended that future researchers may collect perceptions of the students regarding teacher class relationship for more generalizability of the results.*

**Keywords:** Teacher-Class relationship, Emotional intelligence, Academic performance, Higher Education, University Students

### Introduction

Higher education is one of the most significant institutions that unquestionably contributes to the development of societies everywhere.

Aim of the universities is to prepare students who could transform their nations towards development; universities are considered as a very essential element for transforming people. Main concerns are discussed in this approach and educational organizations including universities needs to evaluate as well as boost the accomplishments of students (Jafari & Asgari, 2020). According to Tursunboyeva and Ashirova (2021), the better the teacher-student interaction is the more likely that they are to be able to support students in learning and completing their tasks rapidly at a higher level. The teacher needs to be aware that every student has a unique personality and set of skills; the value of the students' self-concepts, which can be more important and help students to develop self-worth, must be acknowledged from the teacher. Mainly, teacher social and interpersonal behavior, teacher self-efficacy and teacher emotions were distinguished from the teacher class relationship considered as acclaimed from different devise of teachers' experience. Consequently, teacher activities like academic support has been ignored in favor of focusing on mental representation quality of teacher's relationship with the class (Roza et al., 2022).

A deeper understanding between teacher and student will increase the confidence that teachers understand the concepts of the students. Therefore, teachers who treats their students with respect unquestionably earn the respect by having more engaged students in their classroom. Due to lack of authority over the students, the aggressive teacher will surely lack these beneficial traits; teachers should be persisting that they deserve respect as well it is their duty to observe that students are respectable to each other. Teachers are urged to have a balance being harsh and kind with students in their classroom but within reasonable bounds (Tursunboyeva & Ashirova, 2021).

Emotional intelligence is an important parameter for academic performance; it is discovered that student whom have good emotional intelligence also performed exceptionally academically and produced good performance. Interpersonal, adaption, overall mood control and stress management skills were found higher in students with strong emotional intelligence. For students to feel confident, emotional intelligence is a crucial element; students who scored poorly on tests of emotional intelligence also scored poorly on tests of self-confidence. Whereas students who scored high on emotional intelligence tests, they also scored high on both tests of emotional intelligence and self-confidence. Like Nemours factors, educational degree of parents and income of the family were both associated with emotional intelligence. Students whose parents had greater educational understanding were

found to have emotional intelligence likewise higher. Additionally, it was discovered that income positively correlates with levels of emotional intelligence of students. (Kant, 2019).

A basic ability that predicts success in job, in the classroom and in personal-social relationships is emotional intelligence (EI). The WEF paper used academic performance to link socio-emotional knowledge, found that children who received SEL training observed an 11% boost in academic performance. At many levels, including pre-adolescence and college level, emotional intelligence has been shown to be a predictor of academic performance. Students who are emotionally stable performs outstanding in every field and lead to more engaged behaviors toward education than disturbed students. Academic achievement is a significant indicator of academic success as well as of future prospects (Ahmed et al., 2019).

Academic performance is a key area of concentration in Pakistan and its neighboring countries since it is a symbol of students' success and can open doors to a profession through employment and more prospects for career growth. In Pakistan, success has a significant social and cultural impact; contrary to Western civilizations, South Asian cultural frameworks place a high significance in traditional norms like integrity, cooperation as well as self-esteem. Academic context become extremely important for Pakistani students because success not only benefits the students themselves but also their families. Thus, intellectual success carries emotional worth that is influenced by culture. This connection between emotional intelligence and academics has been supported by numerous studies using both performance and trait measurements. Emotional intelligence and academic performance have been proven to have good relationships in studies which are in context of Pakistan (Ahmed et al., 2019).

Various studies have been conducted on teacher-class relationship from last twenty years and teacher student relationship stabilize the mental growth of the students, emotional growth and learning. Different studies were conducted to improve the teacher student's relationship and solving their problems. By considering this phenomena, current study aimed to explore the mediating role of teacher-class relationship, emotional intelligence and academic output of students at university level. Current study would contribute in existing literature on mediating role of teacher-class relationship in emotional intelligence and academic output of students. To the best of our knowledge, no study has been conducted with the mediating factor of teacher-class relationship, emotional intelligence and academic output of students at university level. It is expected that

teacher-class relationship and emotional intelligence can play a vital role in academic progress of students. Present study contributes to predict the mediating role of teacher-class relationship and emotional intelligence in academic progress of students. We first, identify the role of teacher-class relationship as a mediating factor and emotional intelligence in academic success of students at university level. Secondly, this study will add to the literature in context of teacher-class relationship, emotional intelligence and academic success of students. Although various studies have been conducted on this phenomenon, but this study used a different unit of analysis to explore this problem. Thirdly, this study will provide input to the policy makers to suggest measures to improve the teacher class relationship and organize activities which can pay favorable contribution towards the emotional intelligence in order to boost the academic performance of the study which is a significant aspect in various circumstances.

### **Empirical Literature Review**

In higher education, academic performance of the students depends on various aspects including teacher-class relationship, level of satisfaction, motivation, emotional intelligence and generic competence which may affects the academic output of the students in certain ways (Lan, 2020). A student-centered environment which fosters a healthy teacher-student relationship leads to the best possible outcomes regarding student achievements; because it inspires students to successfully complete activities that are meaningful for them individually. According to the literature, positive student-teacher relationship fosters a genuine desire in academic participation at all levels of development; students who have good relationships with their teachers perform better academically. From a conceptual standpoint, efforts to learn, perform and behave are stimulated by thoughts and behaviors; students are driven by a desire to learn and be educated to think and act in certain ways. This drive is considered crucial for their efforts to learn, perform and behave (Baafi, 2020).

Students in higher education enhanced the academic self-efficacy and academic performance which are correlated with higher levels of teacher support that fosters more academic interest and engagement. Primary school students were the subject of a great deal of previous study on student-teacher relationships, which supported to provide a crucial fundamental understanding of how students relationships with their teachers materialize throughout the development of students. Particularly in kindergarten, students who develop strong bonds with their teachers exhibit superior achievement over the course of their primary school

years than do their peers who lack these bonds. Even though student-teacher relationships continue to be crucial for students' engagement and academic achievements as they enter adolescence, less is known about the effects of these relationships (Prewett et al., 2019). There are various causes of academic achievements and failure; quality relationship with teachers promotes and affects the student expectations. Students considered their relationships with teachers beneficial, they reported more positive feelings and able to advance their academic skills without feeling concerned about failing. Students' motivation improved and they tended to engage in more adaptive learning patterns when they believed their teachers encouraged the interactions and mutual respect (Chong et al., 2010).

Despite the widespread usage of Emotional Intelligence in research, no universal definition has been agreed upon. According to the literature, it is capacity that how emotions an individual could control, recognize and appropriately handle as well. According to this theory of emotional intelligence, humans can use their cognitive abilities to observe, comprehend and express their emotions in relationships with others (Mayer et al., 2008). –Substantial work has been done about studying emotional intelligence in previous three decades. This idea has become widely accepted due to the formation of assessment tools and ongoing evaluation of their predictive power, validity and reliability. The reliability of emotional intelligence as a psychological construct is not yet demonstrated though. According to Mayer et al., (2004), the broad category of intelligence included emotional intelligence, which also take account of social, practical and personal intelligence (Halimi et al., 2021). In order to motivate the teachers and students to change their attitudes about their students and learning outcomes, emotional intelligence plays a crucial part in their professional development. Students' trust on teacher and ultimately their learning are influenced by their emotions because they have confidence in their teachers; students are able to collaborate effectively and achieve their academic goals (Shafait et al., 2021).

Mayer et al (2012) suggested about the capacity to control emotions of oneself as well as others respectively. Goleman (1995), a psychologist and former science writer for the New York Times, popularized the idea of emotional intelligence in his ground-breaking book *Emotional Intelligence*. Goleman's book has a significant impact on schools and child education. The focus on emotional intelligence in schools first emerged in Collaborative for Academic, Social, and Emotional Learning. The initiative to make social and emotional learning available to all students was started by researchers and practitioners of CASEL in an

effort to give students an emotional education and improve their chances of success in life. In schools nowadays, social and emotional learning (SEL) is well-known and promoted (Gomez-Leal et al., 2022).

Emotional intelligence is a significant area that has been associated to students' academic performance. For instance, academicians and researchers have looked at the relationship between emotional intelligence and a variety of student's traits like stress management, aberrant behavior and problem-solving skills among others. Students' stress management, deviant conduct and problem-solving skills are all influenced by their emotional intelligence. Emotional intelligence is crucial to the academic performance of the students. A student with a high emotional intelligence may be more self-assured in handling the difficulties of residing in and studying in educational settings; also, a high degree of emotional intelligence may facilitate the learning and as a result it may increase the students' academic achievement. Students' academic success and EI were found to be positively correlated; student's EI abilities can help to improve their academic achievement. Students' academic performance may be significantly impacted by procrastination; although there may be many contributing factors, EI is one of them. Students' EI is related with educational achievement; however, it is crucial when students shift towards university life from college life. In majority of previous studies, the grade-point average (GPA) was used as an indicator of students' academic performance. EI and academic retention were found to be correlated among young adults making the transition from high school to college (Jan & Anwar, 2019).

Since academic performance was initially introduced in early 1980s and it is still used as a criterion in evaluation guidelines. Academic performance has brought about a national emphasis on the evaluation of university student's outcomes. Activities which are relevant to academic accomplishment are regarded as an external accountability which needed at many institutions of higher education. Student's opinion as well as feedback about educational institutions is important because they are clients of those institutions. Examining the academic performance can serve as a basis for student mentoring, a performance indicator for raising standards and a way to demonstrate a success of university. As one of the decisive variables in the evaluation of educational excellence, students' performance includes their level of success in completing important educational goals. It goes incomplete without arguing that academic performance of students is crucial in producing such individuals who constitutes the developed society in all prospective (Jafari & Asgari, 2020).

On the basis of above empirical discussion, following hypothesis is formulated:

"There is statistically insignificant moderating role of teacher-class relationship in emotional intelligence and academic performance of students".

### **Methodology**

In a research study, research design plays a role of a bridge through which researcher reaches at the destination in order to achieve the pre-defined goals. Research design reveals about the plan of the study so as which type of study researcher is going to conduct either quantitative or qualitative. There are many research design like Experimental research design, Correlational research design, Causal- comparative and Cross-sectional survey research design and many more. (Fraenkel et al., 2012). For the present study, cross-sectional survey design was considered more suitable by following the quantitative research method.

From the four faculties (Faculty of Agriculture, Faculty of Medical and Health Sciences, Faculty of Arts and Humanities and Faculty of Social Sciences) of University of Sargodha, a sample of 320 students and 30 teachers was chosen by using convenience sampling technique. Respondents were selected from the department of Plant Pathology (Faculty of Agriculture), department of Medical and Health Sciences (Faculty of Medical and Health Sciences), department of English (Faculty of Arts and Humanities), department of Social Work (Faculty of Social Sciences). Students and teachers of 5th and 7th semester of B.S program from Department of Plant Pathology, Department of English and Department of Social Work; and from Sargodha Medical College, teachers and students of 3<sup>rd</sup> and 4<sup>th</sup> year of MBBS were selected. Data was collected online through Google form; for this purpose, two questionnaires were adopted and used with the consent of authors. First instrument which was used "Teacher-Class Relationship Inventory "TCRI" (Forkosh-Baruch & HersHKovitz, 2018). "TCRI" contained 14 items and it was used to collect data from teachers to know their opinion about relationship with students. Another instrument was "Wong and Law Emotional Intelligence Scale" "WLEIS" developed by Wong and Law (2002) had 16 statements with four aspects. Teacher-class relationship was taken as a mediator in this study; emotional intelligence was an independent variable while dependent variable "academic performance" was measured through marks and cumulative grade point

average of the students. Validity and reliability of the instruments was checked through pilot testing.; both instruments were valid and highly reliable. TCRI Cronbach’s alpha was .737 and of EI was .836. Mediation analysis technique was used in present study.

Mediation Analysis

The third intermediate variable, the mediator, is looked at in regard to the mechanisms that underlie an observed connection among two independent and dependent variables. In a mediational model, the exposure variable is assumed as cause of mediator which in result impacts the outcome variable. The mediator variable helps to illustrate how the exposure and outcome variables are related to one another(MacKinnon et al., 2007). The study by Baron and Kenny (1986) had a significant impact on the widespread usage of mediation analysis in psychology and the social sciences. Utilizing the counterfactual more recently has led to new developments in mediation analysis (Valeri & VanderWeele, 2013). Even in models with interactions and nonlinearities, the counterfactual framework has made it possible to define direct and indirect effects as well as to break down a total effect into its component (direct and indirect effects). Researchers are frequently interested in determining how much of an effect is mediated by a certain intermediary and how much is mediated by other routes. This is achieved by breaking down a total effect into direct and indirect effects(Valeri & VanderWeele, 2013).

Results

Table 1 shows the results of mediation analysis through process Macro (v4.1) (Hayes, 2022).

Table1

Mediating Role of Teacher-Class Relationship in Emotional Intelligence and Academic Performance

Effects	$\beta$	SE	t	p	95% CI	
					LLCI	ULCI
Direct Effect						
EI→AP	-.0021	.0157	-.1363	.8917	-.0330	.0287
Indirect Effect						
EI→TCR	-.0011	.0019			-.0056	.0021
Total Effect						



EI→TCR→AP	-.0033	.0157	-.2076	.8356	-.0342	.0277
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Note: If “zero” falls inside the 95% CI, then don’t refuse the null hypothesis; mediation cannot not be assumed.

The relationship between an independent and a dependent variable that is not mediated by a third variable is examined in a direct effect analysis. The relationship between the independent and dependent variables, which is mediated through a third variable, is examined “indirect Effect.” Total effect shows the overall model including direct and indirect effect. It provides sum of direct and indirect effects.

Table 1 showed that direct effect was insignificant with ( $\beta = -.0021$ , LLCI=  $-.0330$ , and ULCI=  $.0287$  with a 95% bootstrap confidence interval); so, emotional intelligence (independent variable) has an insignificant direct effect on academic performance (dependent variable). Researcher failed to reject the null hypothesis which states the effect between emotional intelligence and academic performance was not direct. Indirect effect was insignificant with ( $\beta = -.0011$ , LLCI=  $-.0056$ , and ULCI=  $.0021$  with a 95% bootstrap confidence interval); so, teacher-class relationship has insignificant mediating effect between emotional intelligence and academic performance. Researcher failed to reject the null hypothesis which showed that the mediating effect of teacher-class relationship with emotional intelligence and academic performance was not direct.

Total effect was also insignificant with ( $\beta = -.0033$ , LLCI=  $-.0342$ , and ULCI=  $.0277$  with a 95% bootstrap confidence interval). Researcher failed to reject another null hypothesis which states that the relationship among the teacher-class relationship, emotional intelligence and academic performance was not direct.

Discussion

Current study intended to investigate the mediating effect of teacher-class relationship in relation with emotional intelligence and academic performance. Results of present study showed an insignificant mediating effect of teacher class relationship between emotional intelligence and academic performance. Chamizo-Nieto et al. (2021) presented that EI and success were more closely related in students at higher level with poorer teacher-student relationships than students having better relationships. A study came to the conclusion that positive and focused connections

among the teacher and the student can foster a reliable environment in the educational institutions. As a result, students' motivation, progress, academic satisfaction and academic success will all grow (Jafari & Asgari, 2020).

Supporting the argument to some extent, findings of a study indicated that the relationship between math teachers and students partially mediated the association between average achievement and school socioeconomic level, but the mediating impact of Chinese teacher-student relationships was not statistically significant. The socio-economic status of students in high school did not affect their opinion of the Chinese teacher-student relationship and this study have not found any evidence of a substantial mediation effect of the Chinese teacher-student relationship. Moreover, between high and low socio-economic status schools, there was no variation in the ability of the Chinese teacher-student relationship.

This gap between math and Chinese teacher-student interactions could be attributed to the two topics' differing qualities (Xuan et al., 2019). According to the research by Hernandez et al., (2017), closeness between teachers and students by which exerting effortful control is associated to academic accomplishment. Beyond earlier success levels and controlling for teacher-student interaction and conflict, effortful control was also a reliable predictor of academic achievement. This has ramifications for intervention programs aimed at simultaneously promoting regulation and achievement. While close relationship with teachers may be less correlated with students' self-regulatory activities; poor interactions between students and teachers are likely a reflection of inadequacies in overt self-regulatory behaviors of students (Zinsser et al., 2015).

### **Conclusion**

In academics, university teachers are considered as a crucial component; since they are a vital well as indisputable part in attaining the objectives of academics. The examination of their proficiency and aptitude in various areas, particularly in the area of their interactions with students is essential (Jafari & Asgari, 2020). Therefore, present study aimed to examine the mediating effect of teacher-class relationship in relation between emotional intelligence and academic performance. On the basis

of obtained results, it was concluded that, a statistically insignificant direct effect was found between emotional intelligence and academic achievement. Moreover, it was found that there was a statistically insignificant indirect effect of teacher class relationship with emotional intelligence and academic performance; that's why teacher class relationship has an insignificant mediating effect in emotional intelligence and academic performance. There was statistically insignificant total effect among the teacher class relationship, emotional intelligence and academic performance was observed.

### **Recommendations**

In future studies, longitudinal research design may be used to clearly understand the directions of teacher-class relationship, emotional intelligence as well as academic success. In future it would be important to know the level of teacher-class relationship, emotional intelligence and academic performance of students at university level. Furthermore, it is recommended that in order to assess the teacher-class relationship, student's perspective may be measured to gain different results. More universities may be included in sample for more generalizability of the results with change over time.

### **Author's Contribution**

RY conducted the analysis and drafted the manuscript. AAS, SN refined the final version of manuscript and incorporated required changes subsequently. All authors contributed to the article planning, reading of draft and approved the submitted version.

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### **Conflict of Interest**

Researchers declares no conflict of interest.

### **Ethics Statement**

According to local legislation and institutional requirements ethical review and approval was nor required for the study on human participants. But while preparing this manuscript all other ethical considerations were full filled and participants consent were received.

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