Elevating the Resilience of Postgraduate Students through Teachers' Professionalism: A Cross-Sectional Study of Public Sector Universities of Punjab, Pakistan

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Abstract: *This study examined the impact of teachers' professionalism on elevating the resilience of postgraduate students at public-sector universities in Punjab, Pakistan. Moreover, the study investigated the relationship between teachers' professionalism and the resilience of postgraduate students. The researchers followed the cross-sectional survey design. The sample for the study (241 postgraduate students of the Department of Education from 10 public-sector universities in Punjab, Pakistan) was selected by employing a stratified random sampling technique. This quantitative study used two scales one adopted the "Brief Resilience Scale" (Smith et al., 2008) and the second one self-structured and self-validated the "Teachers Professionalism Scale" to collect data. We gathered data by distributing them via Google Forms through WhatsApp and email. We analyzed the data using inferential statistics, specifically Pearson correlation and linear regression analysis. Results revealed a positive impact of university teachers' professionalism on the resilience of postgraduate students. Additionally, it was found that there was a significant relationship between university teachers' professionalism and the resilience of postgraduate students. The study recommended focusing on the professionalism of university teachers and developing more interventions to enhance the resilience of postgraduate students.*

Key Words: Teachers' Professionalism, Resilience, Postgraduate Students, Cross-sectional Study

Introduction

The literature surrounding the resilience of postgraduate students, particularly in the context of teachers' professionalism, highlighted the versatile nature of resilience and its pivotal role in educational settings. Radhamani and Kalaivani (2021) found that graduate international students were more academically resilient than postgraduate international students, with the largest differences observed for students from Tanzania. Recent findings indicate that postgraduate students demonstrate low levels in two areas: perseverance and reflection, as well as adaptive helping patterns (Abbas et al., 2024). The third hypothesis of this study says that students have low levels of persistence, reflection, and adaptive help-seeking in the temporal dimension of academic self-regulation. On top of that, they score high on the third part of the measure, which is negative affect and emotional responses. This means that a large percentage of students are able to demonstrate a low level of coping with stress (Abbas et al., 2024).

In a subsequent exploration, Buttazzoni (2022) addressed the pressing mental health concerns among higher education students, noting an alarming rise in anxiety, depression, and stress levels. The study highlights the significance of pedagogical approaches that not only support but actively promote student resilience. It uses a systematic literature review to find five analytical themes that capture the essence of resilience education. These themes range from individuals' plans to improve their own skills to institutions' efforts to build strong learning communities. This research suggests that resilience education

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is critical in mitigating mental health issues and emphasizes the importance of integrating resilience-building strategies within the curriculum (Buttazzoni, 2022).

Zaman et al. (2024a) examined the role of teachers' professionalism in reducing aggressive behavior among university-level resilient students. A quantitative survey of 237 students of MPhil and PhD revealed that resilience significantly moderates the relationship between teachers' professionalism and aggressive behavior. The findings suggest that more interventions are needed to enhance student resilience and reduce aggression.

Mansfield et al., (2016) explained the idea of resilience in teacher education by saying it's more than just being able to bounce back from stress; it also means long-term growth through good responses to tough situations. This perspective shifts the understanding of resilience from a static trait to a dynamic process influenced by both individual capacities and environmental factors. The writers argued that universities should start programs to keep future teachers healthy and happy. They stress the importance of a complete approach that includes both personal and environmental resources to deal with problems (Mansfield et al., 2016).

A student's ability to bounce back also depends on such factors as the specific experiences of a postgraduate student, the quality of the postgraduate programs, and teachers' and peers' support. Social Learning Theory by Bandura (1986) posits that people learn new knowledge, skills, and behaviors through observing other people's behaviors. Within the parameters of postgraduate education, peers and tutors are important sources of learning. Teacher professionalism creates a positive climate that is crucial for supporting postgraduate students' resilience (Han, 2017).

Competence, commitment, professionalism, and collaboration are among the many areas that encompass teaching professionalism (Heck et al., 2018). A teacher with a high level of professionalism develops a favourable learning environment where postgraduate students are given sufficient support in the form of directions, commendations, as well as constructive criticisms when the need arises (Heck et al., 2018). It increases the demand for confidence, competence, and mastery, allowing them to follow through with difficult conditions, which increases their resiliency.

Some of the difficulties commonly a postgraduate student encompasses are workload, time management, financial burdens, and strict academic standards. Besides these challenges, the changes in the expectations and conditions that characterize learning and research contexts mean that learners have to face adversities, change, and rejection. Teacher professionalism is therefore central to enabling student post-performance resilience since he or she directs, encourages, and advises the postgraduate students. Since they receive personal attention and guidance, teacher professionalism ensures that postgraduate students have extra strength to support them during their struggles. The strategies include undertaking professional development, fostering a learning environment that encourages the growth of resilience, mentoring, and using role modelling in order to bring reform among the postgraduate students (Popov et al., 2021).

The researchers found several papers in the literature that examine resilience and teacher professionalism in various settings and grades. Surprisingly few studies have focused on discovering how university teachers' professionalism can help improve postgraduate students' resilience in the specified public sector universities in Punjab, Pakistan, and worldwide. Therefore, the researchers felt the need to study the impact of the professionalism of teachers on the resilience of postgraduate students in public sector universities of Punjab, Pakistan. Moreover, it is of the essence to find out the relationship between teachers' professionalism and the resilience of postgraduate students.

Purpose Statement

The study examined the impact of university teachers' professionalism on elevating the resilience of postgraduate students at public sector universities in Punjab, Pakistan. Moreover, it investigated the relationship between teachers' professionalism and the resilience of postgraduate students.

Objectives

The specific objectives of the study were:

1. To assess the relationship between university teachers' professionalism and the Resilience of Postgraduate students.
2. To investigate the impact of teachers' professionalism on the resilience of postgraduate students.

Hypotheses

The following null hypotheses were tested.

H_01: There is no significant relationship between university teachers' professionalism and the Resilience of Postgraduate students.

H_02: There is no significant impact of university teachers' professionalism on the resilience of postgraduate students.

Literature Review

Casey et al. (2022) revealed that graduate students themselves have slightly higher average vulnerability than the population as a whole, and found resilience in recent literature. Remunerative supervision, perceived expectations, perceived support, the management of time and universities' coping strategies are some of the well-being determinants of postgraduate learners (Casey et al., 2022).

International students encounter distinct challenges, cultivating resilience via collaborative projects, educational environments, and institutional support services (Singh, 2020). To improve student resilience, universities may adopt strategies like promoting peer support networks, facilitating open discussions regarding the realities of postgraduate study, and setting appropriate expectations (Casey et al., 2022).

Explaining the values and expectations while learning, students also agree with the notion that the ability to keep perspective, focus on one's well-being and establish personal resources are important characteristics that are associated with resilience (Holdsworth et al., 2018). The study proved the significance of using specific interventions to enhance the levels of post graduate students' resilience and well-being. Studies show that resilience has a positive correlation with professionalism: professional practice needs to improve both aspects. There is disconfirming evidence; the learner teachers who participated in both organized and informal pro-development activities including seminars, workshops, and peer discussions are more resilient and committed to their profession (Larasati & Kuswandono, 2023). These programs ensure that teachers are well-prepared to deal with challenges (Larasati & Kuswandono, 2023; Abou Assali et al., 2024).

The relationship between teacher resilience and various factors shows a positive correlation with emotion regulation, self-efficacy, and work engagement, whereas it is negatively associated with burnout and turnover intention (Zhang & Luo, 2023). It is noteworthy that postgraduate educators generally demonstrate greater resilience than those at the undergraduate level (Zhang & Luo, 2023). In addition, early career teachers demonstrate substantial capacity to embrace change in assessment practices because of PD activities even though they face unique challenges (Tamah & Wirjawan, 2021). Finally, it can be noted that guidelines for developing the framework of the professional development program can significantly enhance teacher resilience and the impacts of its improvement on students and teachers are positive (Abou Assali et al., 2024).

The studies showed that a strong link exists between the professionalism, stress-coping ability, and the critical thinking and reasoning of teachers and this may have a positive effect, not only to teachers, but also to the learners. Critical thinking and life skills have been focused on in different national studies (Jamil et al., 2020; Naseer et al., 2022; Jamil et al., 2024). Kim and Kim (2024) opined that teacher resilience depends on personal characteristics, interpersonal relationships and environmental factors. Cognoscente and reflexivity are illuminated as fundamental sub-processes in the forming of sustainability and the enhancement of one's progress (Kim & Kim, 2024).

Connell et al (2021), field work activities the students engage in also offer them a chance to build technical as well as non-technical skills, professional socialization and coping mechanisms. Teachers on

the other hand benefit from a school culture, leadership, meaningfulness and professional values. By contrast, some of the risks such as emotional labour, a limited curriculum, and a bad context may be dangerous for resilience (Kim & Kim, 2024). Thus, Kim and Kim (2024) have stated that the pre-service and in-service programs addressing this issue should focus on enhancing the techniques of classroom management, stress coping strategies and the right support for the professional growth of teachers in order to promote the development of resilience of learners.

Manzoor and Ghafoor (2024) found that attitudes that care about students' morals and dedication to their own learning were more common in higher education at public universities. It also found a link between the attitudes taught and how well students performed in university. The study also pointed out that the level of professional commitment, commitment to the teaching profession, and teamwork indication were low among the public sector university teachers in Punjab, Pakistan (Manzoor & Ghafoor, 2024).

The research work reviewed and assessed the professional dispositions of the pre-service teachers in Pakistan, and it asserted that they only embrace partially some of the professional dispositions that are contained in the national standards, and the prospective teacher from South Punjab displayed a significantly higher level of professional dispositions than those from central and North Punjab (Riaz & ul Hassan, 2020).

Khizar et al. (2019) assessed the kind of influence that teacher educator professionalism has on students (prospective teachers). They found that prospective teachers had high professionalism in some areas but not in all areas, and the same applied to teacher educators but to a lesser extent. Prospective teachers perceived certain areas of professionalism in well-defined ways; there was little reflection of teacher-educator professionalism among prospective teachers (Khizar et al., 2019).

The findings of Javed et al. (2020), (a search conducted in Pakistan) indicated that university teachers were less involved in research publications, professional training, and research collaboration with other universities. However, teachers expressed a satisfactory level of satisfaction with the services and facilities provided to them.

Another study identified that overall, university students in Pakistan had a positive attitude towards the teaching profession; this does not depend on gender or the university the students belonged to, but it varies significantly by departments of Urdu and Islamic studies students who showed the most positive attitude. In contrast, students of education have a relatively less positive attitude (Akhtar et al. 2022).

Zaman et al. (2024b) demonstrated that specific teacher behaviors and practices can reduce aggression and foster resilience in students. University educators ought to develop instructional approaches that enhance student resilience, involve learners in problem-solving and project-based learning, and provide guidance and counselling services to tackle students' violent behavior.

Research Design

The study focused on investigating the impact of university teachers' professionalism on elevating the resilience of post graduate students in public sector universities of Punjab, Pakistan. The nature of the study was descriptive. The cross-sectional survey is one of the most common types of observational research that reviews the data collected at a particular period and provides a snapshot of particular phenomena (Setia, 2016). It is valuable for setting prevalence; analysis of health studies; and defining population characteristics (Zuleika, 2022). This concept is considered for its workability, affordability and the ability to provide initial data for other studies (Zuleika, 2022). Since it addresses attitudes, knowledge, and perceptions underlying the behavior of populations, the technique is appropriate for many research objectives in the healthcare and social sciences (Taha & Nawaiseh, 2023). Therefore, cross-sectional survey design was employed to conduct this study.

Population

All postgraduate students of the Department of Education of 10 universities of Punjab were considered as the population of the study. There were 553 students of MPhil (191 male and 362 female) and 151 students

of the PhD (55 male and 96 female) in session 2022-2025. The total population of the study was 704 MPhil & PhD (Edu) Students.

Sample of the Study

Stratified random sampling (SRS) is a common method that has many benefits when used in research and data analysis. They make it possible to make appropriate sampling since the population is split into subsets and samples are then taken randomly from the subsets (Suhr, 2009). SRS is identified to be used together with other techniques to select the best method that suits a particular situation (Buntin, 2020). SRS can be very useful when there is randomness within the population since it assists in maintaining variance some of which cannot be quantified or controlled (Suhr, 2009). However, stratification working depends on the given context (Buntin, 2020). The population of this study was distributed in large areas as all universities of the province of Punjab, Pakistan; therefore the sample for the study was selected by employing a stratified random sampling technique. In the first stage, the province of Punjab was divided into 3 strata i.e. Southern Punjab, Central Punjab and North Punjab and then selected 3 universities from Southern Punjab, 3 from North Punjab and 4 from Central Punjab. A sample of 241 postgraduate students was decided by employing Yamane's (1967) formula, articulated as n = N / (1 + Ne²). The sample of the study comprised 241 (156 female and 85 male) postgraduate students of the Department of Education from 10 public sector universities in Punjab, Pakistan.

Research Tools & Data Collection

Data were collected by using two scales "The Brief Resilience Scale" (Smith et al., 2008), and "Teachers' Professionalism Scale" (self-developed and validated). These scales were validated in the context of the study. Confirmatory factor analysis was also made to ensure the validity of scales. The reliability of scales was calculated by employing the Cronbach Alpha test. Cronbach Alpha value of the "Brief Resilience Scale" was .71 and the "Teachers' Professionalism Scale" was .97. Data was collected by sharing Google forms, and disseminating it through WhatsApp and email.

Data Analysis Techniques

Inferential statistical tools and techniques were employed to analyze the data. Inferential statistics, i.e., Pearson correlation and linear regression analysis, were applied to analyze the obtained data through SPSS (25 Version).

Results

Gender Wise Sample

Figure 1
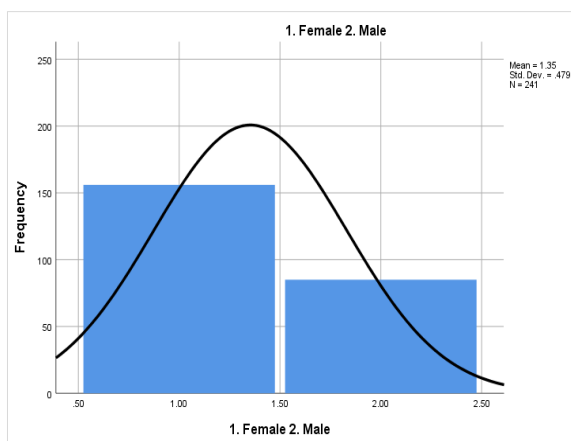
Gender-wise Sample Size

Figure 1 presents the gender-wise sample. There were 64.7% female and 35.3% were male graduate level students include in the sample.

Residence wise Sample
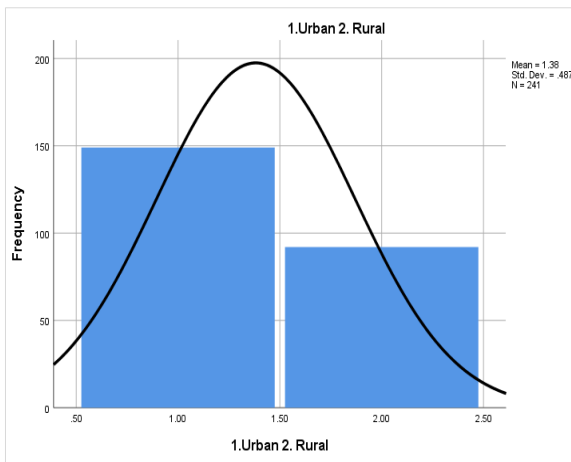
Figure 1

Residence-wise Sample Distribution

Figure 2 demonstrates locality wise distribution of sample. It shows that 61.8% participants were urban residents and 38.2% were rural residents.

Degree Wise Sample

Figure 3
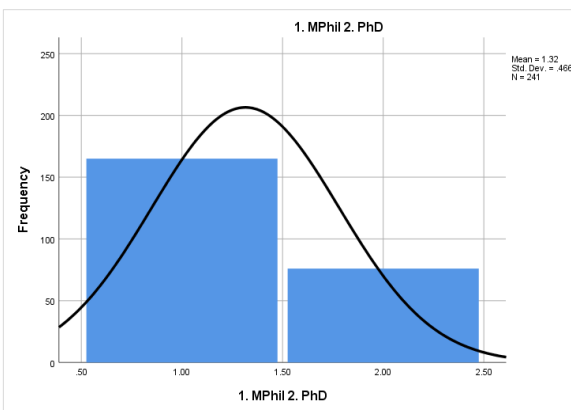
Degree Wise Sample Distribution

Figure 3 presents the degree wise distribution of sample. It shows that there were 68.5% sample participants were degree of MPhil students whereas 31.5% were the students of PhD education students.

Objective 1: To analyze the relationship between university teachers' professionalism and the Resilience of Postgraduate students.

$H_0 1$: There was no significant relationship between university teachers' professionalism and the Resilience of Postgraduate students.

Table 1

Relationship between Teachers' Professionalism and Resilience of Postgraduate students

Variables	N	Mean	SD	USR	TP	Sig.(2-tailed)
Resilience of Students ->	241	3.2960	.74379	1	.266**	.000
Teachers' Professionalism	241	3.6255	.98705		1	

**. Correlation is significant at the 0.01 level (2-tailed).

Table 1 demonstrates that there was a significant positive correlation (r=.266, P=.000<.05) between teachers' professionalism and the resilience of postgraduate students. Therefore, it may be concluded that

teachers' professionalism and the resilience of postgraduate students have a significant positive correlation. Therefore H_01 "*There was no significant relationship between university teachers' professionalism and Resilience of Postgraduate students*" was not accepted.

Objective 2: To analyze the impact of teachers' professionalism on the resilience of postgraduate students. **H02:** There is no significant impact of university teachers' professionalism on the resilience of postgraduate students.

Table 2

Regression Analysis

Model Summary and Parameter Estimates							
	Model Summary					Parameter Estimates	
Equation	R Square	F	df1	df2	Sig.	Constant	b1
Linear	.071	18.262	1	239	.000	2.568	.201

Dependent Variable: University Students' Resilience
independent Variable: Teachers' Professionalism.

Table 2 shows the regression analysis results. The results revealed a significant impact of teachers' professionalism on the resilience of postgraduate students (Sig.= .000<.05, R-square= .071, β= .201, F=18.26). Hence, university teachers' professionalism significantly impacts postgraduate students' resilience. Therefore H_02: "There is no significant impact of university teachers' professionalism on the resilience of postgraduate students" was not accepted.
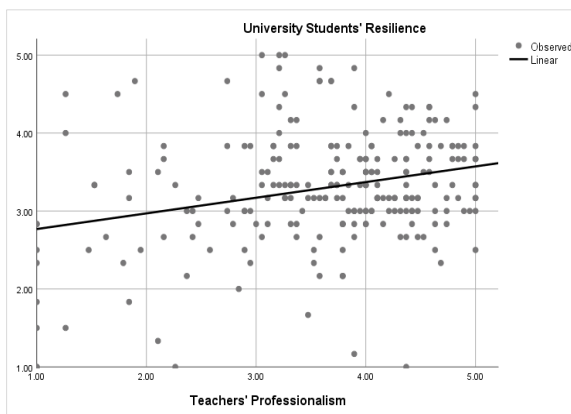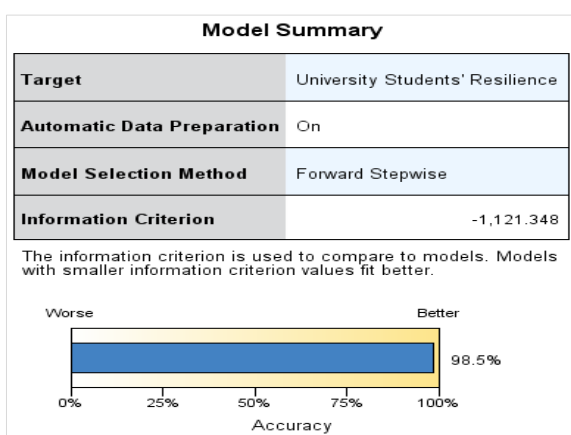
Figure 4

Curve Estimation

Figure 5

Model Summary

Conclusions

The following conclusions were drawn on the basis of the results.

- The first objective of the study was to assess the relationship between university teachers' professionalism and the resilience of postgraduate students. Results showed that there was a significant correlation between university teachers' professionalism and the resilience of postgraduate students.
- The second objective was to examine the impact of teachers' professionalism on the resilience of postgraduate students. Results showed that there was a significant positive impact of university teachers' professionalism on the resilience of postgraduate students.

Discussion

This study found a significant correlation between university teachers' professionalism and the resilience of postgraduate students. Similarly, recent studies have explored the relationships between teacher characteristics and student outcomes in higher education. Research indicates that university teachers' occupational stress resilience positively correlates with their work performance (Hameed et al., 2022). Additionally, psychological resilience in prospective teachers directly influences their attitudes toward the teaching profession and self-efficacy beliefs (Kavgacı, 2022). Tekin and Yayak (2024) found that patience levels significantly predict professional resilience in in-service teachers, accounting for 73% of the variance. Interestingly, male university teachers demonstrate higher work resilience compared to their female counterparts (Hameed et al., 2022). Furthermore, teachers with lower seniority and those working in primary and secondary schools show higher levels of patience and professional resilience (Tekin & Çayak, 2024). These findings highlight the importance of fostering resilience and related qualities in educators to enhance their professional effectiveness and, potentially, student outcomes.

The results of the current study revealed that university teachers' professionalism had a significant positive impact on the resilience of postgraduate students. Recent studies highlight the importance of teacher professionalism and resilience in higher education. Research indicates that university teachers' psychological resilience positively influences their self-efficacy and attitudes toward teaching (Kavgacı, 2022). Additionally, transformational teacher leadership has been shown to positively predict academic resilience and motivation in students, which in turn impacts burnout and academic performance (Trigueros et al., 2020). Researchers have identified the development of a teaching philosophy as a potential method for promoting resilience among university teachers (McCormack et al., 2023). Also, research has looked at the link between resilience, daily spiritual experience, and self-efficacy among university professors, focusing on how postgraduate training affects these traits (Capelo et al., 2021). These findings emphasize the significance of fostering resilience and professionalism in university teachers to enhance both their own well-being and the academic outcomes of their students.

To promote the effectiveness of the intervention and enhance the level of general resilience in postgraduate students, it is essential to elaborate and strengthen the concept of teacher professionalism in the academic context. We suggest allowing teachers to revise their learning and skill bases to ensure students are prepared to face challenges. This includes courses like workshops, trainings, and seminars related to contemporary approaches to teaching and learning (Park et al., 2020). Teachers should play an aggressive role in encouraging free and frequent exchange of information, cooperation, and courtesy. Specifically, they include active learning techniques, encouragement, group discussion, and constructive feedback, among others (Jarboe, 2014). Postgraduate learners should get personal support and coaching from their teachers in order to establish realistic aims, and ways of managing stress, and enhance their efficacy (Karim et al., 2018). They should be enrolled to show how to cope with stress and how a teacher perceives change; a positive perception toward change should be encouraged (Bandura, 1986). This will motivate students to act in that same manner, with the end result being that they develop better-coping mechanisms.

Recommendations

The following recommendations were suggested based on the results of this study.

1. Teachers' professionalism should be focused on in universities.

2. Professional standards may be devised for university teachers.
3. Training should be provided for the professional development of teachers.
4. The curriculum should be revised, and interventions regarding building resilience should be included in the curriculum.
5. Teachers should focus on their instruction methods for promoting resilience among students.
6. Student societies should strengthen to engage in training on aspects such as academic resilience and academic stress management.
7. Teachers should assist students in forming friendships, acquiring academic skills, establishing goals, and providing feedback on their adaptability.

Suggestions for Future Research

1. Diverse student populations and educators may participate in future research.
2. Conventional research may be applied to all public and private universities in Pakistan.
3. Additional variables, including students' family background, economic status, teachers' resilience, parental involvement, and curriculum role, could broaden the scope of research.
4. Interviews and observational research can also be conducted to gather insights from teachers' perspectives.
5. Future researchers may investigate the teachers' resilience and its impact on students' resilience in the universities at various levels, i.e., undergraduate students or graduate students.

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