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# Association between teachers' appreciation and students' performance: an analytical cross-sectional analysis

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The present study aimed to explore the correlation between teachers' appreciation and students' academic performance in Pakistan's postgraduate education context. A research survey served as the primary methodology for data collection. Using a random sampling technique, students from Master in Health Professions Education (MHPE), Master of Science in Nursing (MSN), and Master in Health Care Administration (HCA) from the National University of Medical Sciences were included in the sample, resulting in 150 participants, evenly split between males and females who voluntarily participated in the research. To ensure the reliability and validity of the survey instrument, a pilot testing phase was implemented. Subsequently, data obtained from the survey were analyzed using statistical methods such as Mean, Percentage, Chi-Square, t-test, ANOVA, Mann-Whitney, and Kruskal-Wallis tests. Findings revealed a significant association between teachers' appreciation and students' academic performance at the postgraduate level. Moreover, the study identified that factors such as gender, age, and academic discipline significantly influenced students' perceptions of educators' appreciation, while the distinction between public and private educational backgrounds did not yield any significant variance. Similarly, students' academic performance was significantly influenced by their background, age, and discipline, with gender exhibiting no considerable impact. Consequently, the study underscores the importance of prioritizing the behavioral and attitudinal development of teachers through comprehensive teaching development and training programs. These programs should aim to enhance educators' appreciation of students, thereby potentially fostering improved academic performance among postgraduate students.

## KEYWORDS

teachers' appreciation, academic performance, survey method, postgraduate students, correlational analyses

## 1 Introduction

The relationship between teachers' appreciation and students' performance is pivotal in educational psychology and pedagogy. Appreciated teachers are more motivated and engaged, fostering effective teaching practices and supportive learning environments (Robert and Bridget, 2009). These environments build trust and rapport between teachers and students, enhancing students' confidence, motivation, and academic performance. Positive teacher-student relationships contribute to improved learning experiences and overall academic success. Thus, fostering a culture of appreciation for teachers is vital

for educational excellence and student achievement (Gecer, 2002; Gundogdu and Silman, 2007).

In health professions education, motivation and engagement are critical for mastering complex and demanding curricula (Shah, 2002). Understanding students' perceptions of teachers' appreciation can help in developing strategies to boost motivation, leading to better learning outcomes. Academic achievement in health professions is directly linked to future professional competence. Educators can identify effective ways to enhance student performance and overall educational quality by investigating the association between teachers' appreciation and academic performance. Health professions students come from diverse backgrounds, and their educational needs and responses to appreciation may vary. Examining the effects of gender, sector, age, and discipline helps in customizing teaching methods and appreciation strategies to meet the needs of different student groups, thus promoting equity and inclusivity. Positive relationships between teachers and students are essential in health professions education, where mentorship and guidance play a significant role in professional development. Understanding how appreciation affects these relationships can lead to more supportive and effective learning environments. Insights from this research can inform institutional policies and teaching practices. By recognizing the importance of teacher appreciation, educational institutions can implement policies that promote recognition and appreciation, ultimately leading to improved educational outcomes.

Telli et al. (2007) are of the view that it is a general observation at a global level that the interpersonal relationship of the teacher and student happens to be an important aspect in the teaching and learning procedures. The literature further suggests that praise and penalty have a deeper impact on pupils' learning acumen. That's why teachers' role is no longer confined to imparting knowledge, testing knowledge, and assigning grades. They also have to take on the responsibilities of a man. Shah (2002) holds the opinion that teachers' outlook has a deeper impact on learners' potential. Thus, supplementary teacher training opportunities will not just positively impact the teachers' professional acumen and their conduct but they may boost the learners' outcomes. Thus, this study aims to determine the link between teachers' appreciation and postgraduate-level students' performance. A teacher has gone beyond just teaching class, giving lectures, taking exams, and giving grades; the teacher also takes on the responsibilities of managing, supervising, advising, observing, and assessing the mentees. Another important dimension of teachers' role is that they have the additional responsibility to positively impact society, create a stable foundation on which values can be built, and continually perform this critical role. Positive conduct creates positive outcomes (Fatima and Ali, 2017). However, the conduct can also differ from situation to situation, as it is dynamic in nature. A lot of research has already been done on the need for the development of positive relationships between teachers and students. Most of the time, the behavior of students in class is deliberately chosen i.e., they would either be receptive to learning or distractive (Fatima, 2019b). Students' behavior is like how they make sense of their lives in school and the classroom and the kind of relationship they have with their teachers

(Schlosser, 2023). Finding the attributes of teacher appreciation in the form of their conduct or attitude and highlighting its effect on students' academic outcomes in Pakistan is quite essential. Student perceptions about teachers' appreciation at the postgraduate level can vary widely based on individual experiences, cultural differences, and the specific dynamics within academic programs. It's important to note that individual student perspectives can vary, and a combination of these factors may contribute to an overall positive or negative perception of teacher appreciation at the postgraduate level. Effective communication between teachers and students is essential to understanding and addressing these perceptions to create a conducive learning environment. Research has consistently highlighted the critical role of teacher appreciation in enhancing educational outcomes. Telli et al. (2007) and Shah (2002) emphasize that positive interpersonal relationships between teachers and students significantly impact teaching and learning processes. Appreciated teachers tend to be more motivated and engaged, which translates into more enthusiastic and effective teaching practices, creating a stimulating learning environment. Furthermore, positive teacher-student relationships build trust and rapport, fostering a supportive classroom atmosphere that boosts students' confidence and motivation, leading to better academic performance. Studies also indicate that appreciation contributes to higher job satisfaction and lower turnover rates among teachers, which further benefits students' learning experiences (Fatima and Ali, 2017).

Therefore, teachers' recognition of students' efforts at the university level plays a critical role in enhancing their potential, which is needed by postgraduate learners to achieve better academic achievement. The research is pertinent for shaping how professional obligations are exercised and it also has implications for future studies. This research has attempted to use the findings to help the management at the university acquire the expertise needed by teachers to become successful in their work domain. Meanwhile, postgraduate learners could use these findings to extend their understanding of what kinds of studying habits and preparatory skills they need to acquire to strengthen their educational accomplishments. This study can pave the way for further research in the same area. The study aims to investigate the association between teachers' appreciation and students' academic performance at the postgraduate level. It seeks to understand how teachers' recognition and encouragement impact students' learning outcomes and perceptions. Additionally, the research examines the influence of key demographic factors, such as age, gender, and academic discipline, on students' experiences and perceptions of teacher appreciation, providing a comprehensive understanding of its role in shaping academic achievement. By narrowing the focus, the study also aims to provide actionable insights for improving teacher-student interactions to foster a supportive learning environment. It emphasizes the importance of positive reinforcement from educators and its potential to enhance students' motivation, engagement, and overall academic success. These findings are intended to inform institutional policies and teacher training programs, ensuring that appreciation becomes a cornerstone of teaching practices to promote educational excellence at the postgraduate level.

The research holds the following aims:

1. Assess how postgraduate students perceive and value the appreciation and recognition they receive from their teachers.
2. Collect academic performance data of postgraduate students.
3. Investigate the relationship between the level of appreciation students perceive from teachers and their academic achievement.
4. Analyze how demographic variables such as gender, age, and academic discipline influence students' perceptions of teachers' appreciation.
5. Examine how demographic factors impact academic performance among postgraduate students.

This study was based on the Model of [Zimmerman and Schunk \(2011\)](#) about teacher appreciation, which consists of four dimensions such as motivational, emotional, perceptual, and cognitive processor. These four dimensions were collectively used to define the perception of postgraduate students about teachers' appreciation. While the academic performance of the students was measured in the form of CGPA. Appreciation from teachers can significantly impact students' mental health and well-being. Positive reinforcement can enhance self-esteem, reduce stress, and promote a healthy learning environment, which is crucial in public health education. Improved academic performance linked to teacher appreciation can lead to better educational outcomes. Education is a social determinant of health, influencing future employment, income, and overall health. Recognition and appreciation can motivate students to engage in healthier behaviors and develop positive attitudes toward learning and personal development, aligning with public health promotion goals. A positive environment fostered by appreciative teacher-student interactions can reduce incidents of bullying, improve social relationships, and create a supportive community, which are essential components of public health. Understanding this association can help in formulating policies and interventions in educational settings that promote mental health and well-being, contributing to broader public health objectives.

## 2 Review of literature

[Figure 1](#) shows the mind map diagram explores the interconnected concepts and ideas related to how teachers' appreciation impacts students' performance. The diagram is organized into five main themes. The teachers' appreciation section highlights various forms of appreciation that teachers can offer, including verbal praise, written feedback, recognition, and encouragement. These forms of appreciation serve as positive reinforcement for students. Students' performance section focuses on the different aspects of students' performance that can be influenced by teachers' appreciation. It includes academic achievement, classroom participation, motivation, and self-esteem. Each of these elements contributes to the overall success and development of students. Theoretical perspectives delve into the theories that underpin the relationship between teachers' appreciation and students' performance. It includes self-determination theory which emphasizes the role of autonomy, competence, and relatedness in fostering intrinsic motivation; positive reinforcement highlights how positive

feedback can reinforce desired behaviors and outcomes and social cognitive theory focuses on the role of observational learning, imitation, and modeling in behavior development. Mediating Factors identify factors that mediate the relationship between teachers' appreciation and students' performance. These include student-teacher relationship, classroom environment, and peer Influence: The impact of classmates on an individual student's behavior and performance. Overall, the diagram provides a comprehensive overview of how teachers' appreciation can positively influence students' performance through various direct and indirect pathways.

Numerous studies have highlighted the link between teachers' appreciation and students' performance. For instance, research has shown that schools with high levels of teacher recognition and support tend to have higher student achievement scores ([Ari, 2008](#)). Additionally, teacher appreciation has been linked to reduced burnout and increased job satisfaction, which are important factors in maintaining effective teaching practices and positive student outcomes. It is envisaged that a favorable teacher-student association is likely to generate beneficial classroom interactions and lead to effective teaching and learning outcomes ([Ataunal, 2003](#)). In reality, an intuitive teacher is receptive to students' learning needs and is sensitive toward depicting the changes in students' behavior. It is envisaged that a favorable teacher-student association is likely to generate beneficial classroom interactions and lead to effective teaching and learning outcomes ([Fatima et al., 2021](#)). [Bucholz and Sheffler \(2009\)](#) found that teachers can positively transform their classrooms and improve their pupils' learning acumen. A positive classroom atmosphere comes about through teachers' and students' cooperation and openness with one another.

To ensure successful teaching and learning, nurturing a friendly and relaxed atmosphere in a class is very crucial ([Rauf et al., 2021](#)). This is because students invest a large portion of their energy in instructive foundations. Educators should be progressively imaginative and inventive in instructing and learning approaches or methodologies with the goal that students can procure information adequately ([Fatima et al., 2021a](#)). A major chunk of students' time is spent in their educational institutes, so teachers need to make this time worthwhile for them. They can do so by employing modern and innovative teaching methodology and tactics in the class, to make students learn successfully ([Fatima et al., 2021b](#)). When students have a creative and interesting interaction with knowledge, their interest in the subject of science is bound to flourish. They would be more willing to get actively engaged in creative learning activities. For instance, adopting an investigative approach to an issue would be more beneficial for their learning. Effective learning, according to [Ergin et al. \(2008\)](#), allows learners to develop a relationship between experience and the present one, implement the data acquired to resolve issues, uphold their opinions, and take ownership of issues throughout their lives. Therefore, a teacher's effectiveness is determined primarily based on the success or failure of his or her students' learning outcomes ([Fatima and Ali, 2020](#)).

Many studies have been conducted to explore the bond between learners and teachers and their impact on the achievement of learners. All studies have brought forth the same finding:

when the connection between the teacher and the learners is positive, there would be fewer conflicts in the classroom (Souveny, 2008). All learners, whether well-adjusted or struggling within structured settings, depend on their teacher's reassurance about their worthiness and potential (Fatima and Zamir, 2015). Some students need them more than others to excel. When learners realize that maintaining a positive relationship with their teachers helps them improve their learning outcomes, and when the teachers realize, they become motivated to give more than the formal share of their time to the students. To build a powerful and positive connection with a student, it is essential to remember that there is a complex structure made up of many parts. As per Akçay and Doymuş (2014) view, the learner-teacher relationship and interactions are complicated and have underlying social, psychological, and emotional elements.

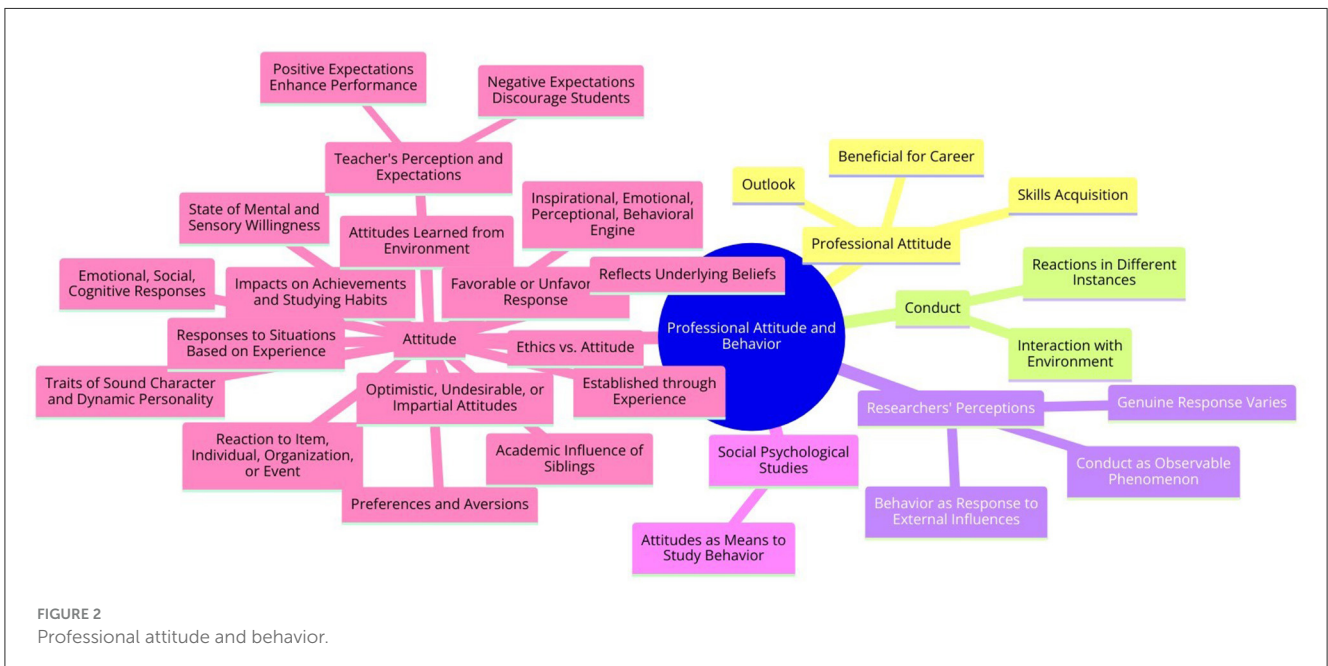
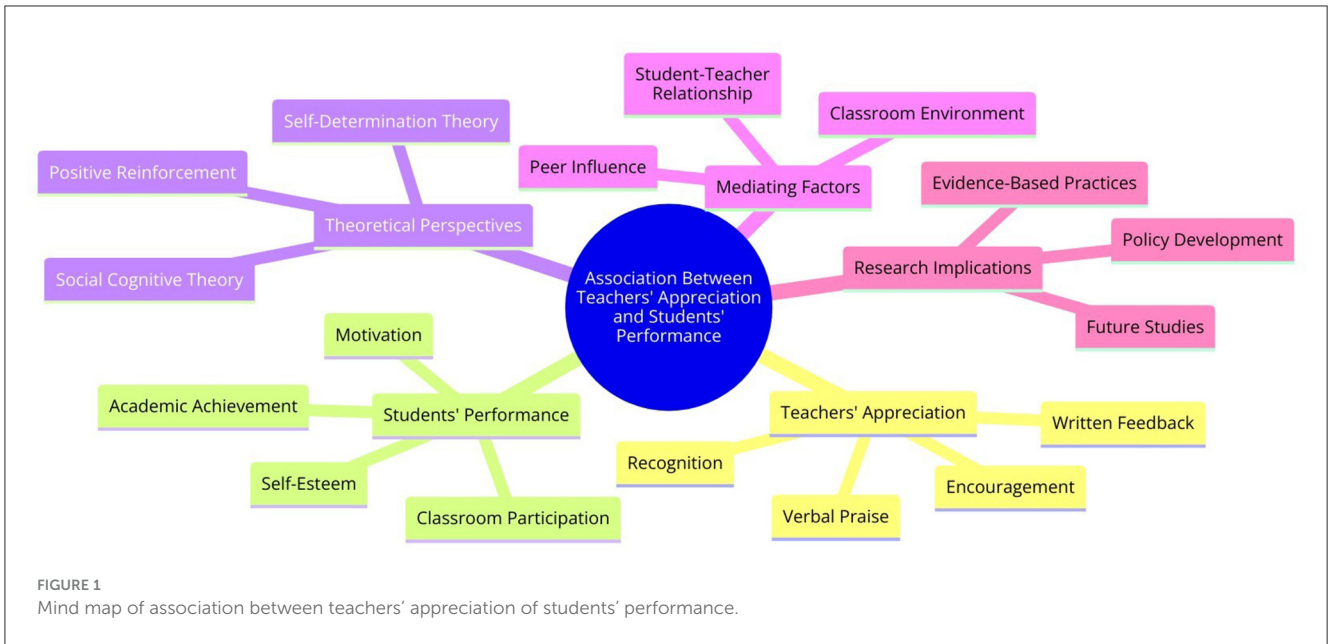
Figure 2 shows that a professional attitude and outlook can serve a person well and acquiring these skills can be beneficial for one's career. Meanwhile, one's conduct is how an individual interacts with and reacts to the surrounding environment in different instances (Fatima and Ali, 2016). Researchers have different perceptions about these. For instance, behavior means responding to external influences. Similarly, one's behavior is a genuine response and varies according to external factors. It was further added that one's conduct can be studied and understood as a phenomenon. "Comportment is an observable, recognizable phenomenon" (Ali and Fatima, 2015).

In social psychological studies, attitudes have been used as a means to study human behaviors. An attitude is the way we react positively or negatively to an item, individual, organization, or event (Elliot and McGregor, 2001). Attitude is a state of mental and sensory willingness, established through experience, shaping the reaction of a person to all the things and circumstances with which it is connected (Zelege, 2004). Students' attitude impacts their achievements and studying habits. Attitude can be described as a lasting inspirational, emotional, perceptual, and behavioral engine that guides the individual's conduct in the world. Attitude also means having and displaying the traits of a sound character and a dynamic personality (Fatima, 2017). An individual's response to any situation, element, organization, or an individual reflects his or her approach and it can be emotional, social, and cognitive. A consistent inclination of an individual to continually respond emotively to a state, individual or thing represents his or her attitude (Fatima and Ali, 2016). Other than this, attitudes are displayed by individuals in everyday life and we all understand these terms. Our thinking pattern and feeling constituent toward an object and people in the setting underline our attitude. In addition to this, our reaction or attitude toward the current situation predicts our behavior toward a similar situation in the future (Fatima and Ali, 2017). Attitude could be a state of readiness that arises from motives. Thinking patterns, observation of an individual, and incentives related to one's environment contribute to the attitude of that person. Attitudes are learned from the environment and their type and intensity depend upon the situation the person is facing currently (Fatima et al., 2018a). The attitude of the people toward all objects can be different; it can be optimistic or undesirable and might be impartial. Different people have varied opinions toward a common object, based

on intertwined perceptions and these are regarded as attitudes (Fatima et al., 2018a). A person's preferences and aversions can be simply defined as attitudes. Attitude is regarded as the favorable or unfavorable response of a person to a specific situation (Gecer, 2002). The notion or idea of any person reflects his/her attitude. It is how something is perceived by a person. Every person reacts to any condition according to his/her underlying beliefs and his state of willingness to respond to that situation establishes his attitude. When any situation is faced by the student or teacher, they respond to that situation according to their own experience and their learning from it (Fatima, 2019b). A student's effort to do work on time determines his/her attitude toward unpunctuality. Students' performance and their self-perceptions are greatly determined by their teachers' expectations (Fatima and Ali, 2019). The academic performance of older siblings influences the academic performance of younger siblings, as one can predict the latter's extent of their diligence from their familial track record (Fatima and Ali, 2017). Similarly, when teachers have negative expectations of any student, they tend to show a negative attitude toward the student as a result the student feels discouraged and performs even more poorly. When teachers have positive expectations related to some students, the students can learn more from the teacher's feedback and get equal learning opportunities. The classroom's atmosphere becomes relaxed as a result (Fatima and Ali, 2020).

Figure 3 shows that when teachers interact with their students in a friendly way it means that they are appreciative of their students' efforts. Sullivan (2009) opines that when teachers become aware of how their capability to convey their knowledge and competencies impacts their students' learning acumen, they make a conscious effort to build a positive relationship with their students so that they can teach them in a better manner. The contribution of teachers to their students' character-building and grooming of their personalities cannot be neglected (Fatima et al., 2021). Teachers' positive or negative students shape students' outlook about themselves, their learning and creativity, and about life around them and others in general (Ataunal, 2003). Since students emulate the behavior of their teachers, the teachers need to act like role models. Many studies conducted on teacher appreciation have shown the link between the students' performance with their interaction with teachers, the approaches teachers use in the class, and students' awareness of them. A positive environment where cooperative learning takes place has also been researched (Fatima et al., 2021). The motivational level of the students can be boosted in different ways, such as by teachers being mindful of students' cognitive processes, taking interest in their lives and concerns, and giving them positive feedback (Fatima et al., 2018a). Students take the attitude of a teacher as a role model and follow their teacher's behavior. When students receive knowledge or insight about solving a dilemma from their teachers, the students begin to perceive the teachers as their role models and utilize their teachers' experiences and behavior to solve that problem (Fatima et al., 2021). Positivity begets success and negativity begets failure. Thus, when struggling students receive negative feedback from teachers their capabilities depreciate further as a result of demotivation (Solmaz et al., 2013). The main components of the teacher's appreciation identified were: encouraging the students to perform well, lending them an ear, displaying a positive outlook, complementing them,

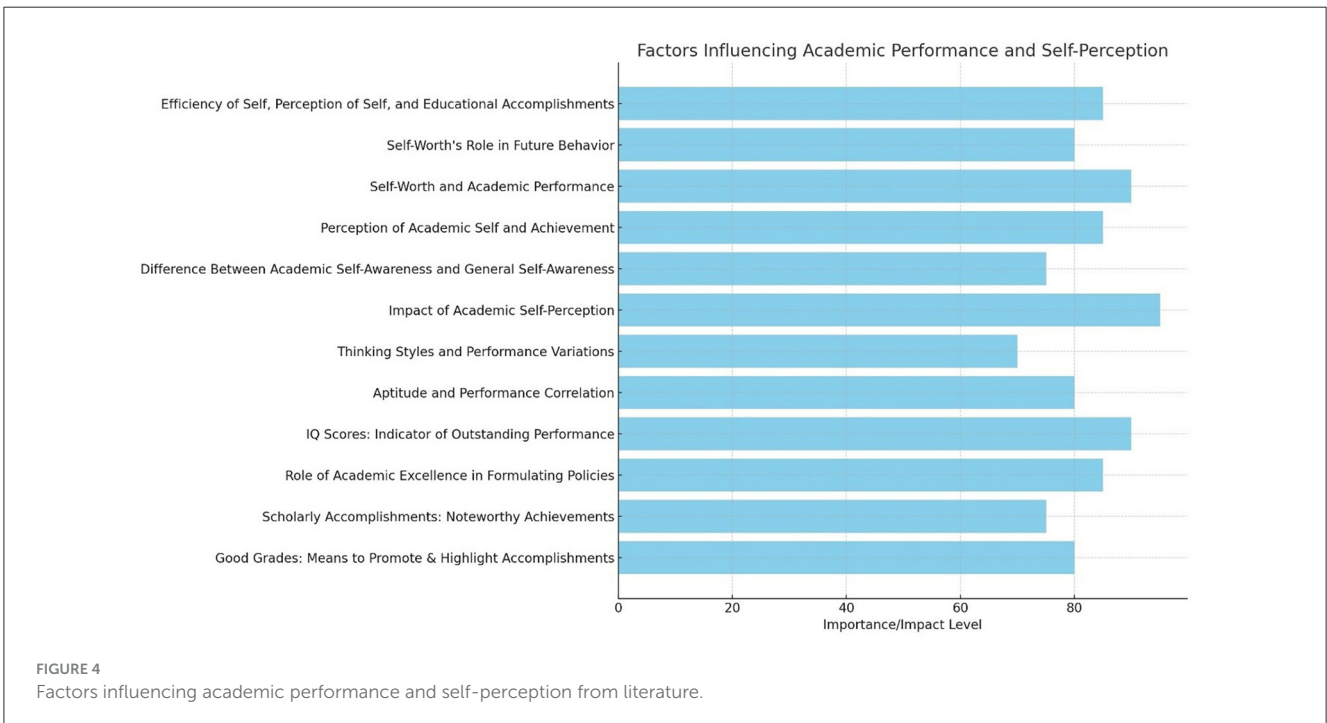
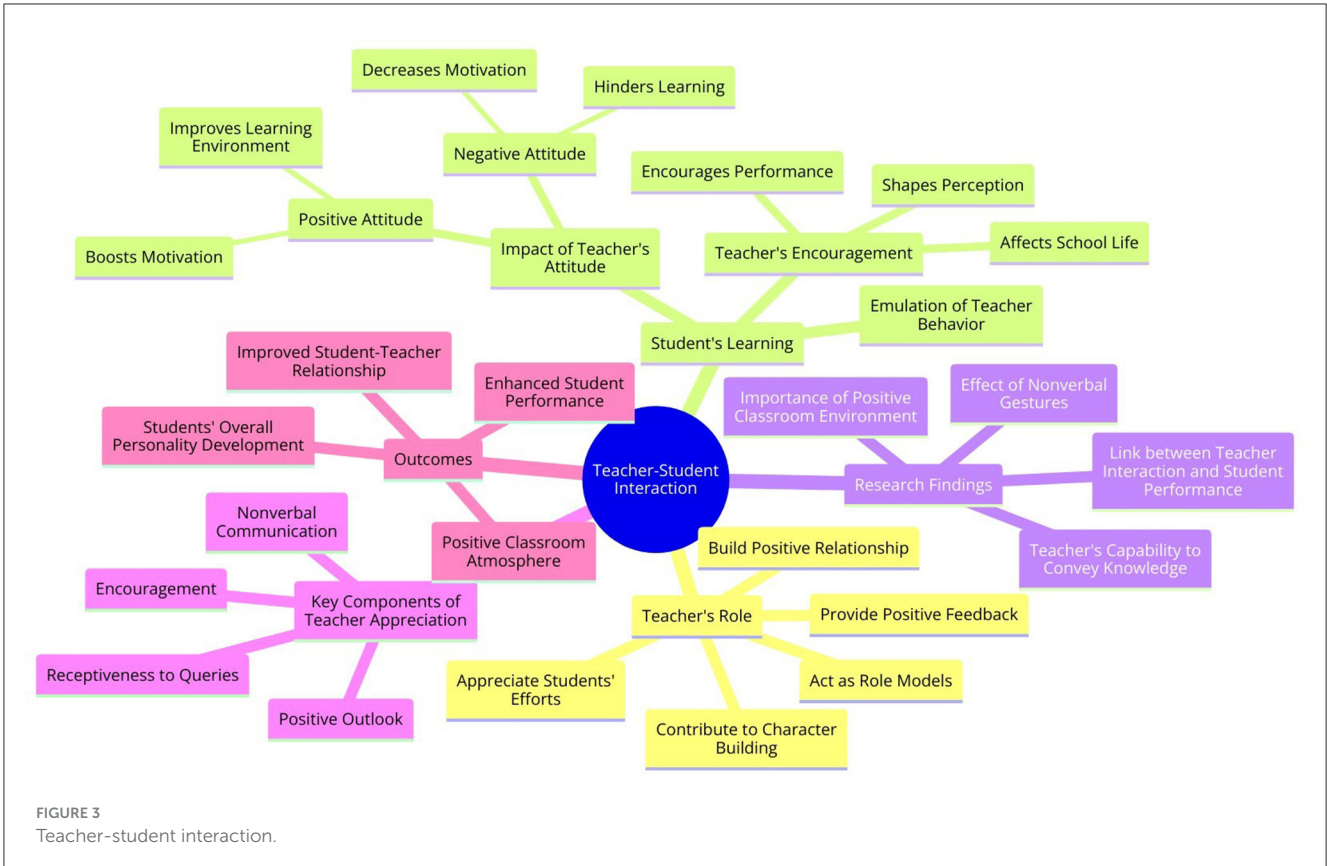




and being receptive to their queries. Students' learning outcomes depend not just on their capabilities but also on the encouragement they receive from their teachers. Teachers' encouragement impacts students' work, their perception of their selves, and their school life, and thus, it shapes students' overall personalities and not just knowledge. According to Gundogdu and Silman (2007), teachers must go beyond elaborating knowledge to students. Teachers are to support students' learning endeavors and this support and positive anticipation motivate students to do better and show teachers' actual capabilities. When teachers display positive behavior in class, students also learn to emulate their behavior, and this improves the class environment (Ali et al., 2018). Someone who communicates well can also teach well. When teachers are receptive to their students' thought processes and feelings, students think of them as being supportive of them and their endeavors. Thus, the students,

in turn, try to emulate the behavior of their teachers, help and support others, and react positively (Thomm et al., 2021).

Researches showed that good grades are not just a means to promote students in the next grade but they also serve as highlights of accomplishment in real life. Similarly, Robert and Bridget (2009) elaborated those scholarly accomplishments help students assess their achievements as being noteworthy for others. Educators and policymakers should research the role of academic excellence in students' lives and the means to optimize them to formulate better and more meaningful policies. Binet endeavored to establish kids' performance based on their IQ scores and has determined that high IQ scores point toward outstanding scores. Sullivan (2004) has linked a high aptitude with high performance. Certain studies also have linked thinking styles' distinctions with performance level variations. Subjects irrelevant to a field showed more evidence of



higher achievements than subjects that were relevant to a particular field. Overall expectations of students have a role to play in their learning outcomes. Their conviction about their capabilities impacts their achievements. How students perceive their academic standing is known as their academic self-perception and determines their academic capabilities and acumen.

Figure 4 shows that factors other than self-perception have commonly been researched in the educational field. Whether self-perception is a result of an underlying factor that brings about academic achievement highlights the importance of studying it for academic study and academic research. Academic self-awareness is different from overall awareness of self. Academic self-awareness

and its role in academic achievement, as opposed to general awareness about self, are more applicable to the educational setup. How one perceives one academic self is a part of how one conceives oneself. How students feel about their knowledge and capability determines how they would perform (Myint and Lourdasamy, 2005). That's why educators and researchers are interested in exploring this dimension. Academic performance is a matter of "skill" as well as "will", and the latter alone cannot help one in achievement if the former is lacking (Fatima et al., 2018b). How learners perceive themselves helps in shaping their persona. This persona or "self-concept" comprises three components: perception of self, knowledge of what one wants to achieve, and self-worth which is determined by the gap between the former and the latter (Sullivan, 2009). Resultantly, one's success doesn't solely depend upon one's circumstances and surrounding conditions but also on one's self-worth and perceptions. The perception of self thus plays an important role in the learning process or is a factor that impacts the process. Consequently, when one's self-worth improves, one's academic performance improves too. This self-worth also plays a role in determining how one behaves in the future and not just shaping the learning outcomes (Zelege, 2004). A superlative sense of self-worth leads to distinguishable academic performance (Fatima et al., 2021).

The relationship between teachers' appreciation and the academic achievement of students at the university level is complex and can be influenced by various factors. While a direct causal relationship may not exist, some correlations and dynamics contribute to the overall academic experience (Ali and Fatima, 2016a). It's important to note that the relationship between teachers' appreciation and academic achievement is multifaceted and can vary among individual students. Additionally, other external factors, such as family support, socioeconomic background, and personal circumstances, also play a role in determining academic success. While teachers' appreciation can positively influence academic outcomes, it is just one component within a broader context of factors that shape students' university experiences (Fatima, 2019a). Therefore, this research tries to situate the role of teachers' appreciation in students' learning outcomes in the context of Pakistan.

## 3 Research methodology

### 3.1 Research design

The researcher used a survey method because it was considered the best method for the researcher to explore all the circumstances of the research. Structured and numerical data through which all the useful information can be achieved is accumulated by the most generally used research tool which was known as a questionnaire. That's why a questionnaire in this study accompanied the survey.

### 3.2 Population and sample

There are 19 public and private universities situated in Islamabad. In this research endeavor, one postgraduate-level

institutes of Islamabad were used as the group under focus due to the delimitation of the study. There were 241 postgraduate students enrolled in National University of Medical Sciences (NUMS) at the time of research. The process of selecting a sample of individuals or items from a larger population to fulfill a certain research objective is known as sampling (Mills, 2019). In statistics, simple random sampling is a basic and often-used method for choosing a sample of people or items from a larger population. The researcher used the Yamane (1967) for calculating the sample size and it was also confirmed by Krejcie and Morgan (1970) table for determining the sample from the targeted population.

$$\text{Yamane Formula } n = \frac{N}{1 + N (e)^2}$$

Where n = sample size,

N = total population (All Postgraduates of NUMS = 241)

e = margin of error

$$n = \frac{241}{1 + 241 (0.05)^2} = 150$$

The university students were taken as samples. Students of Master in Health Professions Education (MHPE) (50), Master of Science in Nursing (MSN)(50), and Master in Health Care Administration (HCA)(50) were taken as samples from NUMS. The application of the Yamane formula for determining sample size in this study is well-justified, as it is a widely recognized method for calculating a representative sample size from a finite population. The formula ensures that the selected sample size is sufficient to achieve statistical accuracy while minimizing the margin of error. By applying this formula, the study accounted for the total population of postgraduate students at the institution and achieved a manageable yet statistically robust sample size of 150 participants. This sample size strikes a balance between resource constraints and the need for reliable, generalizable findings, ensuring the credibility of the research outcomes.

#### 3.2.1 Instrumentation

The theoretical framework is grounded in the Theory of Planned Behavior (TPB), which posits that individual behavior is driven by behavioral intentions where attitudes, subjective norms, and perceived behavioral control play pivotal roles. In the context of this research, the framework will explore how teachers' appreciation influences their teaching behaviors and students' academic performance. In instrumentation, a questionnaire was adopted by the researchers according to the objectives of the study that was developed by Zimmerman and Schunk (2011). The Faculty of Health Professions Education of NUMS, Islamabad, Pakistan, checked the question form, language, and suitability. Some feedback was given to the researcher, which was incorporated into the research tool. The form was then used for the pilot testing phase. The tool's dependability for the proposed purpose was measured by Cronbach's Alpha values, which include cognitive,

TABLE 1 Reliability of teachers' appreciation factors.

| Variable                           | N. of Items | Cronbach's alpha |
|------------------------------------|-------------|------------------|
| Teachers' attitude of appreciation | 36          | 0.948            |
| 1. Motivational Appreciation       | 09          | 0.900            |
| 2. Emotional Appreciation          | 09          | 0.987            |
| 3. Perceptual Appreciation         | 09          | 0.965            |
| 4. Cognitive processor             | 09          | 0.943            |

emotional, perceptual, and motivational factors, as shown in Table 1.

After using Cronbach's Alpha method in the pilot testing phase, the 0.948 Alpha value exhibits that all the assertions were reliable. The academic performance of students in the form of CGPA in the second semester/ half session was acquired from their departments. Data was collected and then transferred to a computer and secured. Data were analyzed through the purpose-built SPSS software. Data were not normally distributed and due to the discrete and continuous nature of both variables, both parametric (t-test, ANOVA) and non-parametric (Chi-square, Mann-Whitney test, and Krushal-Wallis test) techniques were used in the case of inferential statistics while Mean and Percentage in the form of descriptive statistic were used to analyze data. The choice of instrumentation is also appropriate and well-suited to the study's aims. A structured questionnaire based on Zimmerman and Schunk's theoretical model ensures that the dimensions of teachers' appreciation—motivational, emotional, perceptual, and cognitive—are thoroughly examined. The questionnaire was validated through a pilot test, with reliability confirmed by Cronbach's Alpha values exceeding acceptable thresholds for each dimension. This rigorous validation process guarantees the accuracy and consistency of the data collection tool, enabling the study to capture nuanced insights into the relationship between teacher appreciation and students' performance. Together, the chosen sample size formula and instrumentation lend methodological robustness and reliability to the research.

This article adheres to key guidelines for conducting surveys like CROSS (Checklist for Reporting Of Survey Studies) through its systematic and transparent approach to research. It clearly defines the objective of exploring the association between teachers' appreciation and students' academic performance, setting a focused research aim. The methodology is well-documented, including the use of a structured questionnaire and pilot testing to ensure validity and reliability. The sample size calculation, guided by the Yamane formula, and the use of random sampling align with best practices for robust and unbiased data collection. Furthermore, the study employs appropriate statistical analyses, including both parametric and non-parametric tests, ensuring a thorough examination of the data. Ethical considerations are evident in the voluntary participation of students and the secure handling of data. By systematically addressing these elements, the article demonstrates compliance with CROSS survey guidelines, enhancing its credibility and replicability.

## 4 Analysis and interpretation of data

Table 2 provided summarizes the responses of students to various statements about their teachers' attitudes and behaviors. Each statement reflects a different aspect of the teacher's interaction with students, such as support, positivity, clarity in teaching, care for well-being, sensitivity, motivation, use of cultural activities, encouragement, and professionalism. The responses are given as percentages across five categories: Strongly Disagree (SDA), Disagree (DA), Undecided (U), Agree (A), and Strongly Agree (SA). Additionally, a mean score is provided for each statement, indicating the overall level of agreement. A high percentage (60.5%) of students strongly agree that their teacher provides support for all students, with a mean score of 5. A majority (46.9% strongly agree and 47.5% agree) feel their teacher has a positive attitude daily, with a mean score of 4. Many students (47.9% strongly agree) believe their teacher presents information clearly, with a mean score of 4. A significant proportion (54.8% agree and 42.6% strongly agree) feel their teacher cares about their academic and social well-being, with a mean score of 4. 57.7% agree and 37.4% strongly agree that their teacher is sensitive to all students, with a mean score of 4. The majority (63.6% agree and 28.9% strongly agree) say their teacher motivates them to give their best effort, with a mean score of 4. Many students (45.2% strongly agree and 46.4% agree) admire their teacher, with a mean score of 4. 48.2% strongly agree that their teacher uses various cultural activities, with a mean score of 4. 61.0% agree and 30.2% strongly agree that their teacher guides them positively, with a mean score of 4. A high percentage (63.9% agree and 22.6% strongly agree) feel their teacher encourages student feedback, with a mean score of 4. Overall, the responses indicate a generally positive perception of teachers' attitudes and behaviors, with high levels of agreement and strong agreement across most statements. The mean scores consistently being 4 or above suggest that students view their teachers positively in various aspects of their interaction and teaching methodologies.

### 4.1 Inferential statistics

After the normality test, it was found that data about teachers' appreciation were normal while data regarding the CGPA of students were not normally distributed. That is why the Spearman correlation test was used to check the association between these two variables.

Table 3 shows correlations between the students' opinions regarding teachers' attitudes of appreciation and the CGPA of students in the form of their academic performance which was found to be 0.912. It means both variables are positively correlated and significant at 0.01 level (2-tailed) of confidence.

Table 4 shows that gender has very special effect on opinion of students regarding to the topic ( $P = 0.050$ ).

According to Table 5, the mean gender difference was not very significant, according to the given values.

The beneficial effect of both age ( $p < 0.015$ ) and discipline ( $p < 0.000$ ) of students regarding the positive feedback given by teachers to students is shown in Table 6.



TABLE 2 Percentage and mean response of students.

| N  | Teachers' attitude of appreciation   | SDA | DA   | U    | A    | SA   | Mean |
|----|--|-----|------|------|------|------|------|
| 1  | My teacher provides support for all students.  | 2.0 | 0.0  | 1.3  | 36.2 | 60.5 | 5    |
| 2  | My teacher has a positive attitude on a daily basis.   | 1.3 | 1.3  | 2.6  | 47.5 | 46.9 | 4    |
| 3  | My teacher presents the information in a way that is easy to understand  | 2.3 | 1.3  | 3.6  | 44.6 | 47.9 | 4    |
| 4  | My teacher cares about my academic and social well-being   | 1.3 | 1.0  | 0.0  | 54.8 | 42.6 | 4    |
| 5  | My teacher is sensitive to all students  | 1.3 | 1.0  | 2.3  | 57.7 | 37.4 | 4    |
| 6  | My teacher views me as an important part of the classroom  | 0.0 | 0.0  | 6.9  | 69.2 | 23.6 | 4    |
| 7  | My teacher motivates me to give my best effort.  | 0.0 | 1.3  | 5.9  | 63.6 | 28.9 | 4    |
| 8  | I admire my teacher  | 0.0 | 3.9  | 3.9  | 46.4 | 45.2 | 4    |
| 9  | My teacher uses various cultural activities in the lessons, like experimentation, case studies, live examples etc.       | 0.0 | 3.0  | 4.3  | 44.3 | 48.2 | 4    |
| 10 | My teacher guides students in a positive direction for their personal growth   | 1.3 | 3.0  | 4.3  | 61.0 | 30.2 | 4    |
| 11 | My teacher encourages student feedback   | 1.3 | 1.0  | 10.8 | 63.9 | 22.6 | 4    |
| 12 | My teacher acknowledges student effort through recognition and praise  | 2.3 | 4.9  | 6.2  | 50.8 | 35.4 | 4    |
| 13 | My teacher calls upon students in the decision-making process  | 1.3 | 2.6  | 11.1 | 46.9 | 37.7 | 4    |
| 14 | My teacher uses examples of student background experiences, beliefs, and knowledge                                       | 2.6 | 5.9  | 5.6  | 77.7 | 7.9  | 4    |
| 15 | My teacher provides high and clear expectations for academic performance   | 1.3 | 6.6  | 10.2 | 68.2 | 13.4 | 4    |
| 16 | My teacher lets students take risks in classroom learning activities   | 1.3 | 1.3  | 1.3  | 53.8 | 42.0 | 4    |
| 17 | My teacher takes the time to assist individual students that need help   | 1.3 | 2.3  | 3.9  | 44.6 | 47.5 | 4    |
| 18 | My teacher motivates students through inspiring teaching   | 1.3 | 1.3  | 1.3  | 58.0 | 39.0 | 4    |
| 19 | My teacher consistently engages students in meaningful classroom activities that are connected to real-world experiences | 0.0 | 3.3  | 3.6  | 60.3 | 32.5 | 4    |
| 20 | My teacher makes teaching attractive by showing how theory is implemented in the real world                              | 1.3 | 2.3  | 3.6  | 36.1 | 56.4 | 4    |
| 21 | I have a positive view of my teacher   | 1.3 | 1.3  | 9.2  | 66.6 | 21.3 | 5    |
| 22 | My teacher focuses on stopping unwanted behavior for the majority of the class period                                    | 1.3 | 3.3  | 20.0 | 42.3 | 32.8 | 4    |
| 23 | My teacher is accepting to all student's cultures  | 1.3 | 4.6  | 5.9  | 47.5 | 40.3 | 4    |
| 24 | I am able to take risks in the classroom without feeling embarrassed   | 0.0 | 9.2  | 5.2  | 44.9 | 40.3 | 4    |
| 25 | I enjoy coming to my teacher's classroom   | 0.0 | 14.8 | 10.5 | 39.7 | 34.8 | 4    |
| 26 | I view my teacher as a good person and I feel that my teacher is a coach, mentor, or partner                             | 1.3 | 18.4 | 15.4 | 37.7 | 26.9 | 4    |
| 27 | I am able to ask for assistance without fear of rejection or embarrassment   | 1.3 | 12.8 | 12.1 | 39.3 | 34.1 | 4    |
| 28 | My teacher's expectations are high, clear, and fair for all students   | 1.0 | 8.9  | 10.5 | 46.6 | 32.8 | 4    |
| 29 | My teacher uses various strategies to promote unity, order, satisfaction, and less conflict in the classroom             | 1.0 | 9.2  | 13.4 | 46.6 | 29.5 | 4    |
| 30 | My teacher connects emotionally with the students  | 0.0 | 8.2  | 11.1 | 55.1 | 25.2 | 4    |
| 31 | My teacher expects me to succeed   | 0.0 | 7.5  | 23.3 | 34.8 | 34.1 | 4    |
| 32 | My teacher is patient with students when directing them to learn appropriate behaviors                                   | 1.3 | 3.0  | 14.4 | 41.4 | 39.8 | 4    |
| 33 | My teacher has a good attitude   | 1.3 | 2.3  | 4.6  | 59.3 | 32.1 | 4    |
| 34 | My teacher makes positive comments about the student's ability to learn  | 2.6 | 6.9  | 12.1 | 48.5 | 29.5 | 4    |
| 35 | My teacher's classroom is structured with routines and procedures  | 1.3 | 9.8  | 16.4 | 48.9 | 23.3 | 4    |
| 36 | My teacher conducts him/herself professionally   | 1.0 | 7.2  | 9.2  | 42.0 | 40.3 | 4    |

SA, strongly agree (5); A, agree (4); UD, undecided (3); DA, disagree (2); SDA, strongly disagree (1).

The positive effect of age ( $p < 0.000$ ) and disciplines ( $p < 0.000$ ) on academic performance, at a higher level, of students is shown in Table 7.

## 5 Discussion

The research found that learners perceived teachers' praises in a positive light. Their supportive attitude and positive feedback make

students feel nurtured, motivated, and encouraged. Teachers also need to provide learners with clear and high academic achievement standards, so they can participate ardently in the teaching-learning processes. Researchers like [Ataunal \(2003\)](#) believe that optimistic and positive teachers can develop and maintain positive bonds with their students. Further research suggests that learners at the postgraduate level can show better learning outcomes when their teachers are appreciative of their work and efforts. [Myint and Lourdusamy \(2005\)](#) also have the same observations that teachers' praise helps in nurturing a positive relationship with their students. Other research endeavors ([Akçay and Doymuş, 2014](#); [Shah, 2002](#)) were also of the same conclusion that if teachers want their learners to do better academically and eliminate behavioral issues in class, they should encourage and praise them, hear out their issues rather than criticize them.

It was also noted that teachers' appreciation, expressed through positive feedback, encouragement, and recognition, can contribute to students' motivation and engagement ([Sun, 2021](#)). When students feel valued and supported, they may be more likely to actively participate in class, complete assignments, and strive for academic excellence. A positive relationship with teachers can contribute to students' emotional well-being. Feeling appreciated and respected by instructors may reduce stress and anxiety, creating a more conducive environment for effective learning ([Spruyt et al., 2021](#)). Emotionally well-supported students may be better positioned to focus on their studies and perform well academically. Teachers' expectations can influence students' academic performance. When teachers have high expectations and communicate them clearly, students may strive to meet those expectations, leading to improved academic achievement. On the other hand, if teachers show low expectations or lack appreciation, it may impact students' motivation and performance negatively. Constructive feedback and guidance from teachers are essential for academic improvement. Students who receive feedback that helps them understand their strengths and areas for improvement can use this information to enhance their performance ([Romero et al., 2022](#)). Teachers' appreciation may be reflected in the quality and effectiveness of the feedback

TABLE 3 Spearman correlation (N = 150).

| Variables              | Teachers' appreciation | CGPA    |
|------------------------|------------------------|---------|
| Teachers' appreciation | 1                      | 0.786** |
| CGPA of students       | 0.912**                | 1       |

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

TABLE 4 t-test for gender and sectors.

| Variables              | Genders | N  | Means  | Std. Dev. | Std. error | t     | df | Sig.  |
|------------------------|---------|----|--------|-----------|------------|-------|----|-------|
| Teachers' appreciation | Male    | 75 | 141.48 | 16.078    | 1.077      | 1.957 | 74 | 0.050 |
|                        | Female  | 75 | 137.48 | 14.532    | 1.615      |       |    |       |

TABLE 5 Mann-Whitney test for gender and sector effect on students' performance (academic).

| Variable                         | Gender | N  | Mean rank | Sum of rank | U     | W     | Z     | Sig.  |
|----------------------------------|--------|----|-----------|-------------|-------|-------|-------|-------|
| Academic performance of students | Male   | 75 | 153.51    | 34232.00    | 8.807 | 1.123 | 0.370 | 0.711 |
|                                  | Female | 75 | 149.73    | 12128.00    |       |       |       |       |

TABLE 6 ANOVA for age and discipline regarding teachers' appreciation.

| Factors                   | Sum of squares | Df | Mean square | F     | Sig.  |
|---------------------------|----------------|----|-------------|-------|-------|
| Between age groups        | 2079.004       | 3  | 1039.502    | 4.278 | 0.015 |
| Within age groups         | 73144.773      | 74 | 243.006     |       |       |
| Between discipline groups | 6321.040       | 3  | 1264.208    | 5.468 | 0.000 |
| Within discipline groups  | 68902.736      | 74 | 231.217     |       |       |

TABLE 7 Kruskal-Wallis test for age and discipline regarding academic performance of students.

| Variable                         | Factors      | N  | Mean rank | Chi-square | df | Sig.  |
|----------------------------------|--------------|----|-----------|------------|----|-------|
| Academic performance of students | 20–25        | 75 | 135.15    | 76.781     | 2  | 0.000 |
|                                  | 26–30        | 50 | 141.40    |            |    |       |
|                                  | 30 and above | 25 | 256.84    |            |    |       |
|                                  | MHPE         | 50 | 149.50    | 93.928     | 2  | 0.000 |
|                                  | MSN          | 50 | 144.00    |            |    |       |
|                                  | HCA          | 50 | 203.92    |            |    |       |

provided. The overall classroom environment, influenced by the teacher-student relationship, plays a role in academic achievement. A positive and supportive atmosphere can foster a love for learning, collaboration, and effective communication, all of which contribute to academic success. Effective communication and teacher accessibility is crucial (Jenkins et al., 2015). When students feel that they can approach their teachers for clarification, guidance, or additional support, it can positively impact their academic performance. Teachers who are approachable and responsive contribute to a supportive learning environment. Teachers' appreciation can contribute to the development of intrinsic motivation in students. When students find joy and satisfaction in the learning process, they are more likely to excel academically. Intrinsic motivation is linked to a sense of accomplishment and personal fulfillment. This result was quite similar to the works of Fatima and Ali (2020), Fatima et al. (2021) and Rauf et al. (2021) who found that during the teaching phase, a positive engagement with the surroundings will boost all the senses of the learners and motivate them to acquire knowledge creatively and imaginatively. When pupils' actual thought processes are stimulated, they no longer need to memorize factual knowledge and concepts passively. This research also found that statistical factors like age, sex, and area of study affected students' perceptions about the role of teachers' praise in their work. But the sector to which they belonged had no impact on the said element. Likewise, students' academic achievement was impacted by age, sector, and area of study. However, the students' sex had no role to play in their achievements in class and outside it. These findings are in line with what Gundogdu and Silman (2007) have found. Similarly, these results were quite similar to the works of Ali and Fatima (2016b), Fatima and Ali (2019), and Fatima et al. (2021) who found that each person has a range of attitudes that may be rational or irrational and which may differ based on varied sociological objects and situations.

Students appreciate when teachers acknowledge the time and effort they put into their studies. This could include recognizing the rigor of postgraduate coursework, the complexity of research projects, or the challenges of balancing academic and personal commitments. Students often value constructive feedback from teachers (Telli et al., 2007). This involves not only pointing out areas for improvement but also providing guidance on how to enhance their work. Feedback that is specific, actionable, and supportive can contribute to a positive perception. Teachers who are approachable and available for discussions, questions, and additional guidance tend to be well-regarded by students (Peng, 2021). The accessibility of instructors is crucial for fostering a positive learning environment. Positive reinforcement and encouragement from teachers can have a significant impact on students' motivation and self-esteem (Kainat and Sultan, 2020). Recognizing achievements, both big and small, can contribute to a positive perception of teacher appreciation. Cultural factors may influence students' expectations and perceptions of teacher-student relationships. Teachers who demonstrate cultural sensitivity and awareness can create a more inclusive and supportive learning environment (Haryudin and Syihabuddin, 2023). Students appreciate teachers

who are perceived as fair and transparent in their assessments and grading. Clear communication of expectations, grading criteria, and any changes in course structure can help build trust and confidence. Teachers who convey enthusiasm and passion for the subject matter can inspire and engage students. Passionate teaching is often contagious and contributes to a positive perception of the learning experience (Zhang et al., 2024). Professional behavior, including punctuality, responsiveness, and a commitment to the academic well-being of students, is highly valued. Students may perceive teachers who demonstrate professionalism as more appreciative of their roles (Shah, 2002). Teachers who show flexibility and adaptability to the diverse needs and learning styles of postgraduate students can be more positively perceived (Robert and Bridget, 2009).

## 6 Conclusions

1. The study highlights several key insights regarding postgraduate students' perceptions and academic achievements to teachers' praise at the university level. Firstly, the overall perception of teachers' appreciation among postgraduate students is highly positive, indicating a general sense of satisfaction and recognition felt by the students. This positive perception is crucial as it directly correlates with academic achievement; students who feel appreciated and praised by their teachers tend to perform better academically.
2. Moreover, the analysis reveals that demographic factors such as gender, age, and area of study significantly influence students' perceptions of teachers' praise. Specifically, students from various age groups and different areas of study exhibit more favorable perceptions of teacher appreciation, suggesting that these factors contribute to a more positive educational experience. Interestingly, the sector to which the students belonged did not show any significant effect on their perceptions, indicating that institutional differences within the university have little to no impact on how students perceive teacher praise.
3. When examining academic achievement, age and area of study again emerge as significant factors influencing student performance. Older students and those from particular fields of study tend to achieve higher academically, which may be attributed to varying levels of maturity and discipline across age groups and the inherent demands of different academic disciplines. However, unlike perceptions of praise, gender does not appear to influence academic performance, suggesting that male and female students perform equally well when other factors are controlled.

In summary, the findings emphasize the importance of teachers' praise in enhancing academic achievement and highlight the role of demographic factors in shaping students' perceptions and performance. These insights can inform university policies and teaching practices aimed at fostering a more supportive and effective learning environment.

## 7 Recommendations

1. This study was confined to Islamabad universities, so it may be conducted in all the provinces of Pakistan at the university level.
2. Both qualitative and quantitative modes of research may be used that may give a more accurate picture of teachers' appreciation and its effect on the student's performance.
3. Other demographic factors that give a more accurate picture of teachers' backgrounds may be used which would produce a strong impact on their opinions regarding communication climate and self-efficacy.

## Data availability statement

The datasets presented in this article are not readily available because of privacy reasons. Requests to access the datasets should be directed to [fozia.fatima@numspak.edu](mailto:fozia.fatima@numspak.edu).

## Ethics statement

The studies involving humans were approved by Institutional Review Board and Ethical Committee, NUMS. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

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