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Relationship among Teachers' Instructional Strategies, Students' Self-Esteem and their Academic Performance at Undergraduate Level

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Abstract

This quantitative investigation explored the interrelationships between instructional strategies used by teachers, the self-esteem levels of undergraduate students, and their subsequent academic performance. This study engaged a quantitative cross-sectional research design. Data collection was conducted using a simple random sampling method. The sample comprised 500 students from various academic programs across different universities. The Rosenberg Self-Esteem Scale, along with a self-developed Instructional Strategy scale, was pilot tested and utilized in the research. Validation of the instrument was achieved through consultation with experts. Findings indicated the positive significant relationships among variables of the study. Medium positive correlation between Instructional Strategies and Self Esteem was $r = .45$, $p < 0.01$; a medium positive correlation between Instructional Strategies and CGPA was $r = .46$, $p < 0.01$; a very strong and significant relationship between Self Esteem and CGPA was $r = 0.85$, $p < 0.01$. Instructional strategies are essential because they improve the quality of education and the learning process as a whole. The instructional strategies offer students a systematic and engaging way to learn that accommodates a range of learning requirements and to boost their self-esteem. Teachers can address varying learning speeds and capacities in the classroom by using these strategies as a foundation for delivering knowledge in an organized and effective way. Although there exists a substantial body of literature regarding Instructional Strategies and Self-esteem, there is a scarcity of research that directly compares these variables and their effects on learners' academic achievement ay undergraduate level in Pakistan.

***Keywords*.** Teacher's Instructional Strategy, Student's Self-Esteem, Academic Performance, Undergraduate Students.

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Introduction

Effective teaching strategies are key to creating positive learning environments and improving student achievement. When teachers employ diverse and student-centered instructional strategies, it positively impacts students' academic performance and self-esteem (Dignath & Veenman, 2021, Karabenick & Urdan, 2019). According to Kahu and Nelson (2018). There is found an association among Instructional strategies and improved performance and academics as well as increased self-confidence in students.

Bandura (1997) and Rosenberg et al. (1995), have garnered considerable interest in the realm of research on self-esteem research due to its influence on teaching methodologies and student performance. Self-esteem refers to the degree to which an individual values their own worth, reflecting their overall emotional outlook shaped by self-evaluations and feelings. Self-esteem, as a vital aspect of students' mental well-being, plays a significant role in shaping their academic performance. Students with higher self-esteem are more likely to engage actively in class, embrace challenges, and persist through difficulties, which contributes to improved academic outcomes (Marsh & Martin, 2011). In contrast, low self-esteem can hinder academic success by reducing motivation and increasing anxiety (Orth et al., 2012). According to Hattie and Timperley (2007), teachers play a critical role in nurturing students' self-esteem through their teaching approaches, feedback, and interpersonal interactions. By offering positive reinforcement, providing constructive feedback, and fostering an inclusive classroom environment, educators can enhance students' self-esteem (Hattie & Timperley, 2007).

Academic performance is the extent to which a student, teacher, or organization has met either short- or long-term learning goals. Academic achievement performance is measured by cumulative grade point average (GGPA) and learning grade achievement, such as graduation degree (Ahmad, 2008). Academic performance at the undergraduate level is not only influenced by cognitive abilities but also by affective and behavioral factors. Recent research emphasizes the importance of a holistic approach to education that considers students' emotional and psychological needs. Supportive teacher-student relationships and effective instructional strategies significantly predict higher academic performance (Komarraju et al., 2010). The effectiveness of instructional strategies becomes crucial in this dynamic educational environment, impacting both the level of language instruction and students learning outcomes (Lauermann & Berger, 2021).

Exploring the relationship between teachers' instructional strategies, students' self-esteem, and their academic performance at the undergraduate level is of great importance for several reasons. First, understanding this connection allows educators to identify the most effective teaching methods that not only enhance student learning but also boost their self-confidence. Research has consistently shown a strong link between high self-esteem and improved academic outcomes, suggesting that when teaching strategies positively influence students' self-perception, they are more likely to achieve better academic performance. Self-esteem influences how students view their abilities, which directly impacts their motivation, persistence, and overall approach to learning.

Moreover, this research can offer valuable insights into how different instructional approaches can be customized to cater to the diverse needs of undergraduate students. Tailoring teaching methods to support individual learning styles and preferences helps create an inclusive and supportive environment that fosters academic success. Such an approach ensures that all students, regardless of their backgrounds or challenges, feel empowered and motivated to reach their full potential.

By examining the interplay between instructional strategies, self-esteem, and academic performance, the study can contribute to the development of more effective educational practices. These practices not only enhance academic achievement but also promote students' overall well-being and personal growth. In doing so, educators can help cultivate a positive learning environment that nurtures both academic and emotional development, ultimately leading to well-rounded and successful students. This comprehensive approach benefits not only individual learners but also the broader educational community.

Theoretical underpinnings and study framework

Instructional Strategies

Strategy involves carefully planning a series of steps to reach specific goals, while also taking measures to avoid or minimize potential setbacks. Gallén and Bold define instructional strategies as the techniques teachers use to accomplish their learning goals (1989; as cited in Du et al., 2024). The instructional methodology includes several components, including the subject matter, task breakdown, educational objectives, expected transformations in learner behavior, their attitudes, skills, competencies, requirements, and initial conduct.

The instructional methodology encompasses several elements, including educational philosophy, learning theories, educational objectives, feedback on preferred tasks, and motivational factors. According to Benjamin (2007) and Schorzman and Cheek (2004), both

instructional and reading comprehension strategies have been shown to positively influence students' engagement in critical thinking across various texts from different academic fields. A study by Izquierdo-Acebes and Taber (2024) examined the instructional techniques employed by high school science teachers to engage students in constructing scientific explanations. The findings indicated that teachers often use small-scale strategies to interact with and guide students during explanation sessions, yet these strategies are rarely part of a cohesive instructional framework designed to promote the development of scientific explanations.

Metacognitive instructional strategies, which involve classroom activities aimed at enhancing students' metacognitive awareness (Belet & Guven, 2011; Khurram, 2021), have been found to improve academic performance (Habib, 2020). Nafees (2011) highlights that problem-based instructional strategies are effective in supporting student learning, problem-solving, and retention through collaborative learning, student grouping, and an inquiry-based approach to science education. Moreover, cognitive states, classroom behaviors, and instructional strategies are recognized as essential factors influencing student success in tasks (Du et al., 2024). Laatsch (2016) examined the connection between instructional strategies and teacher evaluations, identifying various strategies such as the student-teacher relationship, setting high expectations, classroom management, student and classroom behaviors, teacher clarity, goal setting, questioning and discussion techniques, student engagement, and formative assessment.

Jepketer (2017) makes a distinction between instructional strategies that are cantered on the student, strategies for instruction that are centered on the instructor, and assessment methods, and then investigates the influence that each of these tactics has on the performance of the students. Brain storming instructional strategy improved students' academic performance in mathematics (Obafemi, 2024) same as think-pair-share (TPS) instructional technique improved the academic performance of algebra students (Okafor & Nzomiwu, 2024).

Self-Esteem

Rosenberg et al. (1995) characterized self-esteem as an individual's perception of their own worth, reflecting the degree to which one values themselves. This perspective is informed by how individuals believe they are perceived by others. Self-esteem represents the emotional aspect of one's identity. The term is frequently utilized in everyday discourse. Strok (1997) describes self-esteem as our self-evaluation, which can fluctuate between feelings of being unworthy and valuable members of society to feelings of worthlessness. Similarly, Funder (2007) articulated self-esteem

as a person's conviction regarding their own moral value, encompassing notions of goodness or badness, and worthiness or unworthiness.

Kanwal (2006) investigated the performance orientations of university students in the public sector, revealing that they exhibit higher levels of self-esteem and an internal locus of control. The findings indicated that male students tend to possess an internal locus of control, whereas female students demonstrate a stronger focus on achievement and elevated self-esteem levels. Siahaan et al. (2017) characterize self-esteem as an individual's assessment of their own image and worth. According to Cheema (2013), self-esteem reflects the extent to which an individual appreciates, accepts, and likes themselves. Research conducted by Robins et al. (2002) indicates that self-esteem reaches its highest point during childhood, declines in adolescence, gradually increases during adulthood, and then experiences a significant drop in later life stages. Self-esteem can be defined as the confidence in one's own worth or abilities. It encompasses the capacity to assess and perceive oneself, with outcomes that may be either positive or negative. Essentially, self-esteem represents an individual's overall sense of self-worth or personal value, reflecting how much one values and approves of oneself. It is often considered a characteristic of personality (Dawood, 2021).

Academic Performance

Academic performance is known as the most fundamental cornerstone of the overall education system. For school performance teacher use different metrics for checking the rate of students' academic performance. Academic performance is the tool for measure students' knowledge acquired and indicate overall performance of students through the grades by the teacher (Narad & Abdullah, 2016). In the educational organization settings academic performance is known as the attainment of educational targets and objectives by students, instructors and educational institutions within a given timeframe.

Arifin et al. (2024) explore the relationships between secondary school student academic performance, teacher professional development, and classroom environment and findings of the study show a strong correlation between the classroom atmosphere and students' academic performance as well as teacher professional development. By thoroughly examining AI's influence on student engagement and academic performance, the research effort seeks to close the gap between advancements in technology and educational practices. Awareness of AI uses on daily basis support their academic performance (Fazil et al., 2024)

Instructional Strategies, Self-Esteem and Academic Performance

Literature review reveals the studies on instructional strategies and academic performance, self-esteem and academic performance, but does not indicate any study about the relationship among instructional strategies, self-esteem and academic performance. The study by Obafemi (2024) examined the impact of the brainstorming instructional strategy on students' academic performance in mathematics. The study's conclusions showed that brainstorming significantly improved students' academic performance in mathematics. Okafor and Nzomiwu (2024) studied the influence of the think-pair-share (TPS) instructional technique on the academic performance of algebra students in secondary schools. The findings showed that, when compared to the Conventional Method (CM), the TPS instructional technique is more successful at raising students' academic performance in algebra. Additionally, the academic performance of students taught algebra using the TPS instructional technique and those taught using the CM strategy differed significantly.

The level of an individual's self-esteem may exert a substantial influence on their academic achievement. It indicates that students who prioritize self-care and are more mindful of their physical health and well-being are more likely to get higher marks and make attempts to excel academically. This indicates that students who prioritize self-care and are more mindful of their physical health and well-being are more likely to get higher marks and make attempts to excel academically.

Ariyo (2020) asserts that self-esteem is consistently linked to exceptional performance in tasks and in the workplace. Enhancing one's sense of self-worth may bolster the learners' connection with the facilitator. Students who possess self-esteem are capable of effectively managing and using their spare time can enhance their academic performance. Kariuki et al. (2019) investigated the influence of self-efficacy on learner' academic performance. The study found no significance influence of self-esteem on academic performance. In the same vein, by Kärchner et al., (2021) found no correlation among self-esteem and academic performance.

The goal of Kasyoka's (2023) study was to look into how university students' academic performance was impacted by their study habits and sense of self-worth. A preliminary empirical review indicates that a majority of students, irrespective of their academic performance, reported a high level of self-esteem, demonstrating that self-esteem did not explain high or low academic accomplishment. Academic performance is determined by motivation and self-worth, which in turn influences

academic success. The study's results (Acosta-Gonzaga, 2023) show how behavioral and emotional disengagement relate to self-esteem. An individual's academic success can be predicted by their metacognitive engagement, which is influenced by higher levels of motivation.

Etobro & Aina (2023) work viewed at the relationship between junior secondary school students' self-esteem, attitude toward schooling, and performance in basic science. The findings demonstrated a positive and noteworthy association between students' self-esteem and their academic performance as well as their attitude toward education.

Theoretical Framework

The theoretical framework provides an explanation for the existence of the research issues. The theoretical framework for this study is embedded in the Theory of Didactical Situations (TDS), Self-determination theory (SDT), Self-regulation theory, Achievement goal theory, Rosenberg's Self-esteem Theory, and Learning theories. Mergel (1998) provided a summary of the constructivism, cognitivism, and behaviorism as the three main learning theories of education. The learning environment is contextualized by these notions. The process of teaching involves mentally connecting new information to preexisting cognitive processes. The cognitivism method, while beneficial for intellectual growth, ignores the fact that humans learn by experience (Bowden, 2008). This is how constructivism might be described as an instructional theory. New experiential activities are given to students during the teaching process, and these activities interact with their prior knowledge. To do this, teachers frequently need to draw from a variety of experiences in order to put pupils in circumstances where they can create new knowledge. Behaviorism aims to change an individual's surroundings until their behavior becomes instinctive and follows rules. Positively reinforced behaviors are more likely to be repeated, whereas behaviors meant to avoid unfavorable reinforcements would be repeated.

According to Rosenberg's Self-Esteem Theory (1965), providing positive feedback, concentrating on assets, and creating an atmosphere of encouragement can lead to greater trust and an eagerness to learn. In general, this framework emphasizes the relationship between instructional strategies, self-esteem, and academic performance. Self-Determination Theory (SDT) is considered as a macro-theory of motivation and well-being which concentrates on the specific pedagogical behaviours that educators might apply in the classroom (Ryan & Deci, 2020). According to SDT, people are naturally curious about their surroundings and motivated to learn new things and advance their skills. Teachers are crucial in stimulating students' curiosity and interest since people are so closely

bonded to their social contexts, but they also have the potential to hinder these processes of motivation (Hornstra et al., 2023).

Self-Regulation Theory by Bandura (1986) emphasizes strategies like as goal planning and self-monitoring to encourage learners to take ownership of learning, resulting in enhanced motivation and focus. According to Zimmerman (2013), self-directed approaches are another name for self-regulation theory. Self-regulation outperforms socioeconomic status as a predictor for standard performance test scores.

Achievement Goal Theories (Dweck, 2020; Elliot, 1999) state the types of objectives that students seek, promoting mastery goals that prioritize effort and growth above competition. This increases intrinsic motivation and promotes a favourable academic self-concept. The theory of Achievement goal means to becomes more explicit and refined. Eccles & Moler (2020) state that an individual's research into what they will learn and how they may effectively finish a task is a component of the mastery objective concept. Specificity is a defining characteristic of achievement goals.

Sustainable Development Goals (SDG)

The current study supports the SDG 4: Quality Education under Target 4.c, which states that by 2030, there will be an increment in providing of qualified teachers, with the help of international cooperation in the domain of teacher training focusing this supply to the developing and the least developed countries(United Nations, 2020). Especially least developed countries and Small Island developing States". The current article is in line with the goal of both "substantially increasing the supply of qualified teachers" and "improving the quality of education through improved instructional methodologies and teacher training."

Hypotheses of the Study

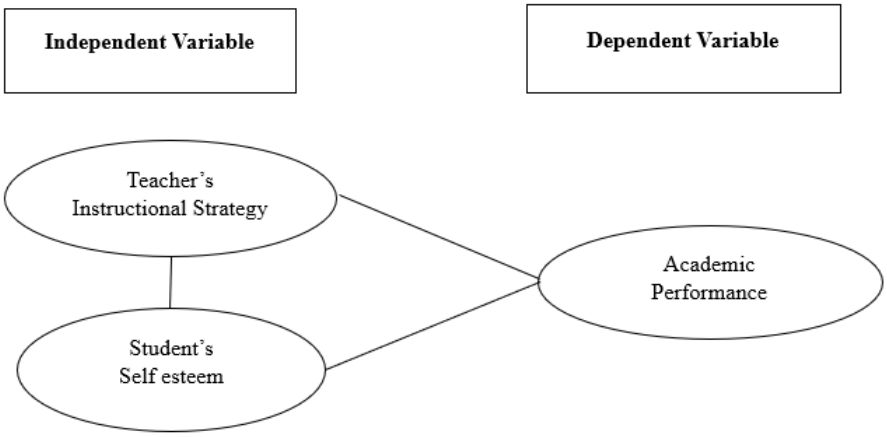
The hypotheses of the study were:

H_{01}: There is no significant relationship between under graduate students' self-esteem and teachers' instructional strategies.

H_{02}: There is no significant relationship between teachers' instructional strategies and their academic performance at undergraduate level.

H_{03}: There is no significant relationship between students' elf-esteem and their academic performance at undergraduate level.

H_{04}: There is no significant relationship among under graduate students' self-esteem, academic performance and teachers' instructional strategies.



Conceptual framework

Materials and Methods

Research design

Research design refers to the strategic planning for conducting a research study. It includes the methods and procedure a researcher used to analyze and collect data (Creswell, 2018). This study uses a quantitative approach, aligned with the positivist philosophy. The positivists approach is interlined to the quantitative research method (Fraenkel et al., 2012). In the quantitative approach, the cross-sectional survey research method was used to explore the relationship among teacher's instructional strategies, student's self-esteem and their academic performance at undergraduate level.

Population and Sample of the Study

The target population for this study was undergraduate students enrolled in public and private universities located in Lahore. An initial selection of six universities (03 public and 03 private) was conducted through a convenience sampling technique. After selecting universities, the five hundred students at undergraduate level were selected through random sample. Two hundred and fifty students each from public and private universities.

Research Instrumentation

The research instrument had three parts. First part was based on demographics; second part Rosenberg Self-esteem Scale and third

Instructional strategies. The first part of the instrument (Rosenberg Self-Esteem Scale) was used to measure student's Self-esteem. The self-esteem scale's reliability was 0.78 after a pilot test. The third part of instrument was self-developed and named as Instructional Strategies Scale. Scale was developed after reviewing literature about relevant variables of the study. The scale (5 point Likert type, Strongly Disagree to Strongly Agree) consisted of fifty-two statements. The instrument was validated by peers and then by the experts. Research instrument was validated by three field experts of education having ten to twelve years of experience in research work. The Instructional Strategy scale demonstrated a reliability coefficient of 0.86, which was determined through pilot testing conducted with a sample of 200 students. The table 1 shows the factor wise reliability of Instructional Strategies Scale. The Cronbach alpha coefficient for all factors indicate the medium to strong reliability.

Table 1

Mean, SD and Reliability of Subscales in Instructional Strategies Scale

Factors	Number of Items	*M*	*SD*	Cronbach's α
1.STR-Student-Teacher Relationship	05	19.87	3.63	0.77
2.SEM-Student Expectation and Motivation	05	17.75	4.18	0.73
3.CRM-Classroom Management	05	20.73	3.35	0.76
4.SCB-Student and Classroom Behaviors	05	17.60	3.51	0.58
5.GS & TC- Goal Setting and Teacher Clarity	06	22.07	4.30	0.76
6.QDT-Questioning and Discussion Techniques	06	22.34	3.87	0.71
7.SE-Student Engagement	05	18.10	3.03	0.71
8.Assessment	05	18.76	3.33	0.67

Data Collection

Data was collected from online Google Form and manually within four weeks.

Ethical Measures of the Styudy

Prior permission was secured from the heads of each respective department. Participants were assured of the confidentiality of all collected data, which would be utilized exclusively for research purposes. The researcher committed to rigorous adherence to all relevant research ethics.

Data Analysis and Results

The researchers applied Pearson's correlation coefficient to analyze the data. The results for each research hypothesis are presented below.

H_{01}: There is no significant relationship between instructional strategies and students' self-esteem at undergraduate level.

Table 2 shows the correlation between variables Instructional Strategies and Student Self-esteem.

Table 2

Correlation between sub factors of Instructional Strategies and Self Esteem

Factor-wise Instructional Strategies	Pearson Correlation (*r*) with Self Esteem
STR	.29**
Sem	.29**
CRM	.32**
SCB	.36**
GS & TC	.22**
QDT	.16**
SE	.16**
Assessment	.26**

** p=0.01

Table 2 shows correlation between factors of Instructional Strategies and Self-Esteem. The analysis identifies statistically significant positive correlations across all factors. Comparatively a weak correlation was seen among student-teacher ($r = .29$, $p < 0.01$), Student expectation and motivation ($r = .29$, $p < 0.01$), questioning and discussion techniques and student engagement ($r = .16$, $p < 0.01$), Goal Setting and Teacher Clarity ($r = .22$, $p < 0.01$) with Self Esteem; while classroom management ($r = .32$, $p < 0.01$) and Classroom Behaviors ($r = .36$, $p < 0.01$) showed moderate co relation.

Table 3

Instructional Strategies and Self Esteem Correlation

		Self Esteem
Instructional Strategies	Pearson Correlation	.45**
	Sig. (2-tailed)	.000
	Sig. (2-tailed)	

** Correlation is significant at the 0.01 level

Table 3 shows a statistically significant medium positive correlation between the two variables, ($r = .45$, $p < 0.01$).

The data illustrated in Tables 2 and 3 supports the rejection of hypothesis **H_{01}**.

H_{02}: There is no significant relationship between teachers' instructional strategies and their academic performance.

For second hypothesis the analysis of data is shown in two tables 4 and 5 about the correlation between instructional strategies and CGPA.

Table 4

Correlation between all Factors of Instructional strategies and CGPA

Factor-wise Instructional Strategies	Pearson Correlation (*r*) with CGPA
STR	.34**
Sem	.29**
CRM	.35**
SCB	.34**
GS & TC	.23**
QDT	.14**
SE	.17**
Assessment	.22**

** Correlation is significant at the 0.01 level

Table 4 presents the results of a correlation analysis between eight factors of Instructional Strategies and CGPA (Cumulative Grade Point Average). The analysis revealed statistically significant positive correlations across all factors. Notably, the Student-Teacher Relationship showed a moderate positive correlation with CGPA, $r = .34$, $p < 0.01$. Similarly, Student Expectation and Motivation exhibited a weak correlation, $r = .29$, $p < 0.01$. Classroom Management also demonstrated a moderate positive correlation, $r = .35$, $p < 0.01$, while Student and Classroom Behaviors showed a comparable moderate positive relationship, $r = .34$, $p < 0.01$. Goal Setting and Teacher Clarity revealed a lower but still statistically significant positive correlation, $r = .23$, $p < 0.01$. Questioning and Discussion Techniques showed a very weak correlation, $r = .14$, $p < 0.01$, and Student Engagement displayed a weak correlation, $r = .17$, $p < 0.01$. Finally, Assessment indicated a weak but significant positive correlation with CGPA, $r = .22$, $p < 0.01$. Overall, these findings suggest that all the instructional strategy factors analyzed are positively and significantly associated with CGPA.

Table 5
Correlation between Instructional Strategies and CGPA

		Instructional Strategies	CGPA
Instructional Strategies	Pearson Correlation		.46**
	Sig. (2-tailed)		.000
CGPA	Pearson Correlation	.46**	
	Sig. (2-tailed)	.000	

** Correlation is significant at the 0.01 level

Table 5 shows correlation between Instructional Strategies and CGPA (Cumulative Grade Point Average). There is a medium positive correlation between these two variables ($r = .46$, $p < 0.01$). The results presented in Tables 4 and 5 support the rejection of hypothesis **H_{02}.**

H_{03}: There is no significant relationship between students' self-esteem and their academic performance.

Table 6 shows the correlation between Self-esteem and CGPA.

Table 6
Correlation between Self Esteem and CGPA

		CGPA
Self Esteem	Pearson Correlation	0.85**
	Sig. (2-tailed)	.000
	Sig. (2-tailed)	

** Correlation is significant at the 0.01 level

Table 6 shows a very strong positive correlation between Total Self Esteem and CGPA ($r = 0.85$,$p < 0.01$). These results suggest a strong and significant relationship between. Consequently, the findings presented in Table 6 lead to the rejection of the null hypothesis **H_{03}**.

H_{04}: There is no significant relationship among teachers' instructional strategies, students' self-esteem and academic performance.

Table 7
Correlation among Instructional Strategies, Self Esteem and CGPA

		Instructional Strategies	Self Esteem	CGPA
Instructional Strategies	Pearson Correlation		.45**	.46**
	Sig. (2-tailed)		.000	.000
Self Esteem	Pearson Correlation	.45**		0.85**
	Sig. (2-tailed)	.000		.000
CGPA	Pearson Correlation	.46**	0.85**	
	Sig. (2-tailed)	.000	.000	

** p= 0.01

Table 7 shows correlation analysis among Instructional Strategies, Self Esteem, and CGPA (Cumulative Grade Point Average) The analysis revealed a medium positive correlation between Instructional Strategies and Self Esteem, with a correlation coefficient of r = .45 and a significance level of $p < 0.01$. Additionally, a medium positive correlation was found between Total Instructional Strategies and CGPA, indicated by r = .46 and $p < 0.01$. Furthermore, a very strong positive correlation was observed between Total Self Esteem and CGPA, with a correlation coefficient of r = 0.85 and $p < 0.01$, suggesting that higher self-esteem is linked to higher CGPA. Overall, these results highlight significant interrelationships among Instructional Strategies, Self Esteem, and CGPA. Consequently, the fourth null hypothesis $\mathbf{H_{04}}$ is rejected based on the findings presented in Table 7.

Discussion

Effective instructional strategies not only influence academic outcomes but also impact students' psychological well-being, particularly their self-esteem. Instructional strategies encompass the various methods teachers use to engage students in learning. According to Bandura's social cognitive theory, effective teaching approaches that offer opportunities for mastery experiences, social modeling, social persuasion, and physiological responses can enhance students' self-efficacy beliefs (Lamon, 2020). Research has shown that when teachers employ supportive strategies—such as providing constructive feedback, encouraging autonomy, and fostering a positive classroom environment—students are more likely to develop higher self-esteem (Dignath & Veenman, 2021).

The study found significant positive correlations between instructional strategies and students' academic performance, as measured by CGPA. This aligns with existing literature that underscores the positive impact of tailored and effective teaching strategies on academic success (Hattie, 2009). A strong positive correlation was also found between students' self-esteem and their academic performance. This supports previous research suggesting that higher self-esteem is linked to better academic performance (Marsh & Martin, 2011). Students with higher self-esteem are often better at managing and utilizing their spare time, which further enhances their academic performance (Ariyo, 2020).

These findings are consistent with a study by Du et al. (2024), which tracked college students' success rates on tasks and examined how instructional strategies affected task performance through both internal and observable engagement indicators. The analysis revealed significant interrelationships among instructional strategies, self-esteem, and academic performance. The moderate positive correlations between instructional strategies and both self-esteem and CGPA, coupled with the strong positive correlation between self-esteem and CGPA, suggest a complex dynamic in which effective instructional strategies boost self-esteem, which in turn improves academic performance.

Conclusion, Delimitations, and Future Directions

The correlation analysis revealed a significant positive relationship between instructional strategies, self-esteem, and academic performance, as indicated by CGPA. These findings support the conclusion that these variables are positively associated. Effective instructional strategies significantly impacted students' academic performance while also enhancing their self-confidence and sense of self. Specifically, a medium positive relationship was found between instructional strategies and self-esteem, and a similar medium positive connection between instructional strategies and CGPA, demonstrating the considerable influence of teaching methods on students' academic achievement. Notably, the strong positive relationship between CGPA and self-esteem emphasizes the crucial role of self-esteem in academic success—students with higher self-esteem are more likely to excel academically.

Delimitations refer to the boundaries or limits of the study, defined by the researcher's decisions regarding objectives, research questions, variables, population, and environment. These delimitations help clarify the scope of the study and determine what is included or excluded (Creswell, 2018). This study was delimited to undergraduate students at private and public universities in Lahore.

Based on these findings, it is recommended that educators employ a variety of teaching methods to enhance both student self-esteem and academic performance. Teacher training programs should prioritize effective and supportive instructional strategies. Additionally, collaboration among educators, administrators, and researchers can deepen understanding of the relationship between teaching methods, self-esteem, and academic success. Future research could explore similar studies at the school level to better understand how student-teacher relationships impact instructional strategies, self-esteem, and academic performance, offering insights into early educational interventions. A more diverse sample could help ensure more comprehensive results.

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