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**Impact of Teaching Efficacy on Students' Academic Achievement at Secondary Level**

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## Abstract

Teaching efficacy, or teachers' belief in their ability to influence student learning, plays a critical role in shaping instructional practices and classroom environments. Higher teaching efficacy is strongly linked to improved students' academic achievement, fostering motivation, engagement, and better learning outcomes. The objectives of the study were to find the level of teaching efficacy and students' academic achievement, to identify the effect and relationship between teaching efficacy and students' academic achievement at secondary level. This quantitative research utilized a multistage sampling technique. The population comprised all private and public school teachers at the secondary level in Lahore. A questionnaire was used as the instrument for data collection. The researcher developed a five-point Likert scale questionnaire ranging from "strongly agree" to "strongly disagree." Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson  $r$  and regression analysis) were applied, and the data were analyzed using SPSS. The findings of the study revealed that The Pearson value 0.562

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and sig value 0.000 shows that there was moderate positive significant relationship between teaching efficacy and students' academic achievement at secondary level. Also, there was highly significant effect of teaching efficacy on students' academic achievement at secondary level.

**Keywords:** Teaching efficacy, students' academic achievement, secondary level

### INTRODUCTION

Teaching efficacy, a critical concept in educational research, refers to a teacher's belief in their ability to foster meaningful learning and positively influence student outcomes. This self-perception of competence is not merely a personal attribute but a dynamic construct shaped by a variety of internal and external factors, including professional experience, pedagogical knowledge, and the sociocultural context of the classroom (Bandura, 1997; Tschannen-Moran & Hoy, 2001). The significance of teaching efficacy lies in its profound impact on teaching practices, student engagement, and academic achievement. Teachers with high levels of efficacy demonstrate a proactive and adaptive approach to teaching, often going beyond traditional methods to create inclusive and stimulating learning environments (Hattie, 2009; Darling-Hammond, 2000). This ability to innovate and adapt is particularly vital in addressing the diverse needs of contemporary classrooms, where students vary widely in their cultural backgrounds, learning styles, and academic preparedness. The link between teaching efficacy and student academic achievement has been extensively documented in educational literature (Lei, Chen, & Luo, 2024). Studies suggest that teachers who possess strong efficacy beliefs are more likely to employ student-centered instructional strategies, maintain high expectations for all learners, and persist in overcoming classroom challenges (Goddard, Hoy, & Woolfolk Hoy, 2000; Skaalvik & Skaalvik, 2010). These educators are also better equipped to establish positive relationships with their students, fostering a supportive environment that enhances motivation and academic performance (Marzano, 2003; Pajares, 1996). The mechanisms through which teaching efficacy influences student outcomes are multifaceted, encompassing both cognitive and affective domains (Conrad, Kablitz, & Schumann, 2024). On the cognitive level, effective teachers employ evidence-based practices, such as

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formative assessments and differentiated instruction, to meet the diverse learning needs of their students (Black & Wiliam, 1998; Tomlinson, 2001). On the affective level, they cultivate a classroom culture of mutual respect and collaboration, which not only boosts student self-esteem but also encourages active participation in the learning process (Woolfolk Hoy & Davis, 2006; Cheung, 2008).

Teaching efficacy is not an isolated phenomenon; it operates within a complex ecosystem of contextual factors that include school leadership, professional development opportunities, and access to resources. Effective school leaders play a crucial role in nurturing teacher efficacy by providing constructive feedback, fostering a culture of collaboration, and facilitating access to professional learning communities (Hallinger, 2003; Guskey, 1988). These communities, in turn, offer a platform for teachers to share best practices, discuss challenges, and collectively work towards improving student outcomes (DuFour, 2004; Vescio, Ross, & Adams, 2008). Moreover, ongoing professional development programs that focus on enhancing pedagogical skills and subject knowledge can significantly bolster teaching efficacy, enabling teachers to respond effectively to the evolving demands of their profession (Kennedy, 2016; Muijs & Reynolds, 2011). Access to adequate classroom resources, including technology, instructional materials, and support staff, further enhances a teacher's ability to implement effective teaching strategies and achieve desired educational outcomes (Shulman, 1986; Zeichner & Liston, 1996). The importance of teaching efficacy is particularly pronounced in under-resourced and marginalized educational settings, where systemic inequities often pose significant barriers to student success. Teachers in these contexts face unique challenges, such as large class sizes, inadequate infrastructure, and limited access to professional development (Gay, 2002; Ladson-Billings, 1995). Despite these obstacles, educators with high levels of efficacy are more likely to adopt a resilient and resourceful approach, leveraging their skills and creativity to mitigate the impact of these constraints on student learning (Ross, 1994; Ashton & Webb, 1986).

Their commitment to equity and inclusion ensures that all students, regardless of their socioeconomic background, have access to quality education and opportunities to achieve their full potential (Tschannen-Moran & Hoy, 2007; Skaalvik & Skaalvik, 2010). Understanding the

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determinants of teaching efficacy is essential for designing interventions that enhance teacher performance and, by extension, student outcomes. Research indicates that teaching efficacy is influenced by a combination of personal and contextual factors. Personal factors include a teacher's prior experiences, educational background, and intrinsic motivation, while contextual factors encompass the quality of teacher preparation programs, the availability of mentoring and coaching, and the broader policy environment (Hoy & Spero, 2005; Klassen & Chiu, 2010). For instance, novice teachers who receive comprehensive training and mentorship during their induction phase are more likely to develop a strong sense of efficacy, which serves as a foundation for their professional growth (Darling-Hammond, 2000; Guskey, 2002). Similarly, policies that prioritize teacher well-being and professional autonomy can create an enabling environment that supports the development of teaching efficacy (Ingersoll, 2001; Day et al., 2007). While the relationship between teaching efficacy and student academic achievement is well-established, there is a growing recognition of its broader implications for holistic student development. In addition to fostering academic success, teachers with high efficacy beliefs contribute to the social-emotional growth of their students, equipping them with the skills needed to navigate complex interpersonal and societal challenges (Elias et al., 1997; Zins et al., 2004). This holistic approach to education aligns with contemporary frameworks that emphasize the importance of preparing students for lifelong learning and active citizenship (UNESCO, 2015; OECD, 2018). By cultivating critical thinking, collaboration, and resilience, effective teachers play a pivotal role in shaping well-rounded individuals who can thrive in an increasingly interconnected and dynamic world.

Despite the extensive body of research on teaching efficacy, several gaps and challenges remain. One notable challenge is the difficulty of operationalizing and measuring teaching efficacy, given its multifaceted nature and dependence on contextual variables (Hoy & Spero, 2005; Klassen et al., 2011). Existing assessment tools, such as self-report surveys and classroom observations, often fail to capture the full complexity of this construct, necessitating the development of more comprehensive and nuanced evaluation methods (Tschannen-Moran & Hoy, 2001; Goddard et al., 2004). Another area for further exploration is the interplay between teaching efficacy and other teacher characteristics,

such as cultural competence, emotional intelligence, and reflective practice (Gay, 2002; Schon, 1983). Understanding these interconnections can provide deeper insights into the factors that contribute to effective teaching and inform targeted interventions for teacher development. In conclusion, teaching efficacy is a cornerstone of effective education, with far-reaching implications for student achievement and holistic development. By empowering teachers to believe in their ability to make a difference, we can create a ripple effect that transforms classrooms, schools, and communities. The journey towards enhancing teaching efficacy requires a concerted effort from all stakeholders, including educators, policymakers, researchers, and community members. Through collaborative action and a commitment to continuous improvement, we can ensure that every teacher is equipped to inspire and empower their students, laying the foundation for a more equitable and prosperous future.

### **Objectives**

- 1- To find out the level of teaching efficacy and students' academic achievement at secondary level.
- 2- To identify the relationship between teaching efficacy and students' academic achievement at secondary level.
- 3- To analyze the effect of teaching efficacy on students' academic achievement at secondary level.

### **METHODOLOGY**

This quantitative research utilized a multistage sampling technique. The population comprised all private and public school teachers at the secondary level in Lahore. The data were collected by dividing the population into four strata, with each stratum identified through stratified sampling. Secondary schools in the Lahore District were categorized into five tehsils as clusters using cluster sampling. From each cluster, two male public, two female public, two male private, and two female private schools were selected through simple random sampling. A total of 320 teachers participated in the study. Forty secondary schools (20 public and 20 private) were chosen using simple random sampling, and from each school, eight teachers were selected through the same method. A questionnaire was used as the instrument for data collection. The researcher developed a five-point Likert scale questionnaire ranging from "strongly agree" to "strongly disagree." The validity of the

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questionnaire was determined through expert opinions, and reliability was confirmed via pilot testing, with Cronbach's Alpha values of 0.792 for teacher efficacy and 0.812 for students' achievement. Descriptive statistics (mean and standard deviation) and inferential statistics (Pearson  $r$  and regression analysis) were applied, and the data were analyzed using SPSS.

### DATA ANALYSIS

**Table 1: *Sample description on the basis of mean and standard deviation***

Variables	M	S.D.
Teaching Efficacy	1.8892	.62281
Students' Academic Achievement	1.9815	.63357

The above table illustrates the mean and standard deviation of teaching efficacy and students' academic achievement. The teaching efficacy (M=1.88; SD=0.62) and students' academic achievement (M=1.98; SD=0.63). Overall respondents' responses reflected toward the level of agreement.

**Table 2: *Teaching Efficacy description on the basis of mean and standard deviation***

Items	M	S.D.
I am confident in my ability to effectively engage students with diverse learning needs.	1.87	.905
I believe I can successfully motivate even the most challenging students to participate in learning activities.	2.04	.901
I believe I can create a classroom environment that fosters mutual respect, collaboration, and active learning.	1.77	.962
I am confident that my teaching can positively influence student achievement, even in a resource-limited environment.	1.90	.899
I feel capable of using various instructional strategies to address the unique needs of all my students.	1.87	.889

The above table illustrates the mean and standard deviation of teaching efficacy. According to the respondents' responses, I am confident in my ability to effectively engage students with diverse learning needs (M=1.87; SD=0.90), I believe I can successfully motivate even the most challenging students to participate in learning activities

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(M=2.04; SD=0.90), I believe I can create a classroom environment that fosters mutual respect, collaboration, and active learning (M=1.77; SD=0.96), I am confident that my teaching can positively influence student achievement, even in a resource-limited environment (M=1.90; SD=0.89) and I feel capable of using various instructional strategies to address the unique needs of all my students (M=1.87; SD=0.88). Overall respondents' responses reflected toward the level of agreement.

**Table 3: Students' Academic Achievement description on the basis of mean and standard deviation**

Items	M	S.D.
Student academic achievement is positively influenced.	1.94	.921
Students grow and development through quality education practices.	2.02	.859
Student learning progress is enhanced by innovative educational approaches.	1.99	.899
Students benefit from the new strategies implemented.	1.96	.937
Students demonstrate increased thinking skills and problem-solving abilities as a result of interactive learning experiences.	2.00	.910

The above table illustrates the mean and standard deviation of Students' Academic Achievement. According to the respondents' responses, Student academic achievement is positively influenced (M=1.94; SD=0.92), Students grow and development through quality education practices (M=2.02; SD=0.85), Student learning progress is enhanced by innovative educational approaches (M=1.99; SD=0.89), Students benefit from the new strategies implemented (M=1.96; SD=0.93), and Students demonstrate increased thinking skills and problem-solving abilities as a result of interactive learning experiences (M=2.00; SD=0.91). Overall respondents' responses reflected toward the level of agreement.

**Table 4: Relationship between teaching efficacy and students' academic achievement at secondary level**

		Teaching Efficacy	Students' Academic Achievement
Teaching Efficacy	Pearson	1	.562**

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	Correlation		
	Sig. (2-tailed)		.000
	N	320	320
Students'	Pearson	.562**	1
Academic	Correlation		
Achievement	Sig. (2-tailed)	.000	
	N	320	320

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

The above table illustrates the relationship between teaching efficacy and students' academic achievement at secondary level. The Pearson value 0.562 and sig value 0.000 shows that there was moderate positive significant relationship between teaching efficacy and students' academic achievement at secondary level.

**Table 5: Effect of Teaching Efficacy on Students' Academic Achievement at secondary level**

	Sum of Squares	df	Mean Square	F	Sig.
	208.358	1	208.358	758.109	.000 <sup>b</sup>
Effectiveness of Teaching	451.560	318	.275		
	659.918	319			

a. Dependent Variable: Teaching Efficacy

b. Predictors: (Constant), Students' Academic Achievement

The above table illustrates the mean square value 0.275, f-value 758.109 and sig-value 0.000 shows highly significant effect of teaching efficacy on students' academic achievement at secondary level.

**Table 6: Effect of Teaching Efficacy on Students' Academic Achievement at secondary level**

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Effectiveness of Teaching	.902	.041			
	.572	.021	.562	27.534	.000

a. Dependent Variable: Students' Academic Achievement

The above table illustrates the effect of teaching efficacy on students' academic achievement at secondary level. The B-value 0.562, t-value 27.534 and sig-value 0.000 shows highly significant effect of



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teaching efficacy on students' academic achievement at secondary level.

### DISCUSSION

Teaching efficacy, or a teacher's belief in their ability to positively impact student learning, plays a significant role in shaping students' academic achievement. Teachers with high efficacy are more likely to adopt innovative instructional strategies, create supportive classroom environments, and persist in overcoming challenges. Research indicates a strong correlation between teaching efficacy and improved student outcomes, as high-efficacy teachers effectively engage students, use differentiated instruction, and foster positive relationships (Van Eycken, Amitai, & Van Houtte, 2024). They also demonstrate resilience in addressing resource constraints and behavioral issues, ensuring minimal disruption to learning. Professional development, mentorship, and administrative support can strengthen teaching efficacy by building confidence and enhancing instructional practices (Zhou, Padrón, Waxman, Baek, & Acosta, 2024). This, in turn, creates a positive feedback loop where successful teaching experiences further boost efficacy. Prioritizing teaching efficacy within schools is essential for improving educational quality and student success.

The Pearson correlation value of 0.562 and a significance value of 0.000 indicate a moderate positive and statistically significant relationship between teaching efficacy and students' academic achievement at the secondary level. This suggests that as teachers' efficacy improves, there is a corresponding positive impact on students' academic performance (Grant, & Drew, 2024). The moderate strength of the correlation highlights that teaching efficacy is an important factor influencing achievement, though other factors may also contribute. The significant p-value ( $p < 0.05$ ) confirms the reliability of this relationship, suggesting that it is unlikely to have occurred by chance. These findings emphasize the need for targeted interventions, such as professional development and teacher support programs, to enhance teaching efficacy and ultimately improve student outcomes (Daniel, Msambwa, Antony, & Wan, 2024). Prioritizing such efforts could have a substantial impact on educational quality and achievement at the secondary level.

The B-value of 0.562, t-value of 27.534, and a significance value of 0.000 indicate a highly significant effect of teaching efficacy on students' academic achievement at the secondary level. The positive B-value

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demonstrates that teaching efficacy positively influences student outcomes, with higher teaching efficacy leading to better academic performance. The large t-value further confirms the strength of this effect, while the sig-value ( $p < 0.05$ ) ensures that the results are statistically reliable and not due to chance. These findings highlight the critical role of teaching efficacy in shaping student success and underscore the importance of supporting teachers through professional development and training programs (Özdemir, Gümüş, Kılınç, & Bellibaş, 2024). By focusing on enhancing teaching efficacy, schools can create a direct and measurable impact on academic achievement.

### CONCLUSION

In conclusion, teaching efficacy has a significant and positive impact on students' academic achievement at the secondary level, as evidenced by the statistical findings. The Pearson correlation value of 0.562 with a sig-value of 0.000 highlights a moderate positive relationship, suggesting that improved teaching efficacy leads to enhanced student performance. Additionally, the regression analysis, with a B-value of 0.562, a t-value of 27.534, and a sig-value of 0.000, confirms the highly significant effect of teaching efficacy on academic outcomes. These results underscore the importance of equipping teachers with the skills and confidence needed to influence student success effectively. Strengthening teaching efficacy through professional development, mentorship, and administrative support can directly impact educational quality. Moreover, creating a supportive environment for teachers can amplify this effect, fostering a positive cycle of improved teaching and learning. Therefore, prioritizing teaching efficacy is crucial for achieving better academic outcomes and overall school improvement.

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