

**RESEARCH PAPER****Effect of Prospective Teachers' Growth Mindset on their Self-Efficacy, Psychological Well-Being and Academic Achievement****¹Iqra Tabassum, ² Muhammad Riaz Rana and Farheen Gull**

1. Visiting Lecturer, Department of Education, University of Jhang, Punjab, Pakistan
2. Independent Researcher
3. MPhil Education, Department of Education, Institute of Southern Punjab Multan, Punjab, Pakistan

***Corresponding Author:** iqra.mp2018f06t@gmail.com**ABSTRACT**

The objective of this study was to investigate the effect of the Growth Mindset on the prospective teachers' Self-Efficacy, Psychological Well-being and Academic Achievement. There were 400 Prospective teachers selected with Cluster sampling from four universities based in Lahore. Their Growth Mindset has been measured with Growth Mindset Scale developed by Chen et al. (2023) and their Self-Efficacy has been measured with the Academic Self-Efficacy developed by Kunnathodi (2016). Similarly, their Psychological Wellbeing has been measured with the Psychological Wellbeing Scale by (Ryff et al., 2018) whereas their academic achievement has been measured while taking scores of their semester. Pearson's r and Regression Analysis indicated a positive and moderate effect of Growth Mindset on prospective teachers' Self-Efficacy, Psychological Wellbeing and Academic Achievement. Therefore, it is recommended that the Growth Mindset should be developed in the Prospective Teachers so that their Psychological Wellbeing, Self-Efficacy and Academic Achievement could be effected positively.

KEYWORDS: Academic Achievement, Growth Mindset, Psychological Wellbeing, Self-Efficacy**Introduction**

The social, emotional, and intellectual growth of kids is greatly influenced by their teachers. The association between instructional strategies, academic success, motivation, and student participation is well-supported by research (Keeseey et al., 2018). Recent study has focused on the occupational well-being sector because the teachers' mental health contributes in improving students' well-being, academic achievement, and teachers' passion to their profession and have acknowledged the complexity of teacher well-being, which consists of aspects that are particular to the profession as well as those that are generic, such as professional fulfillment and satisfaction (Dweck & Yeager, 2019). Psychological stances like mindset, grit, and mindfulness have a big impact on a person's beliefs, behaviors, and overall wellbeing. This affects a person's academic achievement and involvement in the workplace. Teachers who embrace a development mindset are more engaged and have better wellbeing, claims Dweck (2006). It has to do with one's belief in the adaptability of one's abilities (Gausdal & Svendsen, 2023).

Carol Dweck's intelligence theories propose two perspectives individuals may adopt about their own intellectual abilities: fixed or malleable. In educational contexts, these viewpoints are commonly termed fixed and growth mindsets. The fixed mindset theory posits that intelligence is an immutable trait, resistant to change (Dweck, 2014). Students adhering to this mindset may struggle to acknowledge their talents and may exhibit frustration or disappointment when faced with challenges beyond their comfort zone. Embracing a fixed mindset may lead students to fret about the extent of their innate

intelligence, prioritizing the appearance of having sufficient intelligence (Sheffler et al., 2023).

On the other hand, the theory of malleable intelligence suggests regarding intellectual abilities that tend to be developed or expanded through dedicated practice and effort (Dweck, 2014; Sheffler et al., 2023). Prospective Teachers having a growth mindset may display greater perseverance when tackling challenging tasks or encountering new obstacles. However, Dweck notes that students embracing a growth mindset may willingly forgo opportunities to appear intelligent in favor of opportunities to learn something new (Irie et al., 2018).

It is crucial to recognize that individuals may exhibit different mindsets in various domains. A student might demonstrate a fixed mindset in academic pursuits such as math or reading but exhibit a growth mindset in relation to athletic abilities (Han & Stieha, 2020). Identifying students' strengths and mindsets is vital for educators, enabling them to customize instruction for satisfying the distinctive necessities of each student (Emerson et al., 2017). Recognizing students' mindsets is equally important as understanding their learning preferences and interests (Gausdal & Svendsen, 2023). The detailed literature review has been stated as under:

Literature Review

Growth Mindset

The educators' perspectives have a significant impact on how successful their careers are. These viewpoints also have the power to influence teachers' ideas of success and failure, guiding their approach to conquering challenges in the classroom (Dweck & Yeager, 2019). Given the complexity of the educational process, the concept of mentality becomes even more important. A person's fundamental ideas on many aspects of human nature, such as personality traits, are referred to as their mindset (Keeseey et al., 2018). The notion that each of the above mentioned elements is malleable and capable of improvement forms the basis of a development mindset. Conversely, a fixed mindset is linked to the conviction that a person's skills, character, intelligence quotient, and personality are immutable (Emerson et al., 2017).

As someone has a growth mentality, their self-perception of their abilities changes as they encounter obstacles. They are inextricably linked to actions, perspectives, objectives, and modes of instruction. Linguistic thinking centers on individual perspectives about the plasticity of language learning (Kern et al., 2016). Recently, the interest has been aroused in education research to investigate people's perceptions about their fixed or flexible traits. A variety of emotional elements influence attitudes, some of which are speaking anxiety, autonomy, well-being, perseverance, and communication preparation (Greenier et al., 2021).

Furthermore, it is asserted that views can change on a range of topics that fit under the fixed mentality and growth categories. Instructors with a growth mindset are perceived as adaptable, whilst those with a fixed mindset are perceived as inflexible (Hue & Lau, 2015). Professionals that embrace a growth mindset see their own traits and teaching strategies as evolving phenomena (Granziera et al., 2023).

An overview of studies has been provided conducted between 1998 and 2017 on the mindsets of instructors, students, and academic accomplishment. They demonstrated that although the mindsets of the students had a major influence on this result, the mindsets of the instructors had more role in the academic achievement of the students (Irie et al., 2018).

It is argued that tenacity in one's efforts, wellbeing, and a growth mindset might all be markers of job engagement. Growth mindsets offer quantifiable, beneficial, and theoretically well-documented benefits for both instructors and children. In a separate research, it has been examined the links between growth mindset, classroom atmosphere, and student involvement using boredom as a mediator. The results demonstrated that classroom boredom was the primary predictor of students' participation, with development mindsets having an indirect effect on students' degree of interest (Gausdal & Svendsen, 2023).

According to a separate study, instructors' preconceived notions about students and learning may have an impact on their attitudes. The development mindsets of instructors and students' assessments of their own character, abilities, and attributes were shown to be significantly correlated in the study. According to the study, students' perceptions of their IQ and ability level might be affected by the judgments of their professors (Sheffler et al., 2023).

Furthermore, it is stated that a teacher's viewpoint and emotions might significantly affect their level of engagement at work. The study found that teachers' higher levels of job engagement and their development of a teaching mentality were mediated by professional satisfaction (Han & Stieha, 2020). Additionally, it has been looked at how instructors saw their field of work and found that while they highly valued interpersonal skills, they gave their technical expertise more weight (Gausdal & Svendsen, 2023).

The concept of mindset is an implicit theory that states that fundamental human talents, or growth mindsets, are ideas about one's own tendencies. As it has been pointed out, growth mindset educators place a high value on adaptability, effort, resilience, and tenacity (Han & Stieha, 2020). The growth mindset having individuals think that intellect can be developed with practice, and teachers can encourage students to adopt this way of thinking. The growth mindset maintains that intellect is not fixed but may be improved via hard effort and ongoing study (Steinmayr et al., 2019).

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Psychological Well-Being

A new definition of well-being called psychological well-being has been presented, which represents the highest level of positive functioning in humans. Psychological well-being is measured with the Psychological Well-Being Scale (PWB) (Hue & Lau, 2015). It encompasses crucial elements of wellbeing like having a purpose and meaning in life, being involved and interested, having relationships that are supportive and fulfilling, being able to contribute to the well-being of others, being

competent, accepting of oneself, being optimistic, and being respected (Granziera et al., 2023).

Self-Efficacy

Self-efficacy is the perception people hold regarding their capability to successfully handle challenging situations. Albert Bandura (1997) emphasized that self-efficacy goes beyond influencing how individuals perceive attitudes and obstacles; it significantly shapes their choices, level of effort, and determination to persist until they achieve success (Bandura, 1997). The formation of an individual's self-efficacy relies on past achievements, particularly those involving overcoming challenges through dedicated effort (Zander et al., 2018). Conversely, encountering failure can swiftly erode an being's self-esteem, particularly if they are accustomed to achieving success effortlessly (Nabavi, 2012).

Academic Achievement

Today's classrooms are characterized by a diverse mix of students hailing from various cultural backgrounds and home environments, each with unique academic, social, and emotional needs (Bergen, 2013). The promotion of a growth mindset among students has been established as a catalyst for heightened motivation, a sense of ownership in learning, and improved academic performance (Fallah, 2017).

Research suggests that pupils who adopt a growth-oriented viewpoint are probable to exhibit increased levels of engagement and achieve higher levels of academic achievement. Previous studies have demonstrated that growth mindsets can be developed quickly and that they can be further developed through recommended interventions (Bergen, 2013).

A growth mentality is therefore likely to foster social commitment as demonstrated by persistent effort in academic work. Additionally, it's believed that a growth mindset improves engagement in fulfilling, self-directed, and meaningful learning experiences—all of which indicate an emotional investment in the subject matter. Increased supposed academic proficiency is also attendant with a better appreciation of the value of homework, which ultimately serves to validate students' academic achievements (Joseph et al., 2012).

Material and Methods

This study (Quantitative in nature) investigated the effect of the Growth Mindset on the prospective teachers' Self-Efficacy, Psychological Well-being and Academic Achievement. For this purpose, 400 Prospective teachers have been selected from four universities (including two public and two private) based in Lahore while using the Cluster sampling. The prospective teachers' Growth Mindset has been measured with the help of Growth Mindset Scale developed by Chen et al. (2023) and their Self-Efficacy has been measured with the Academic Self-Efficacy developed by Kunnathodi (2016). Similarly, their Psychological Wellbeing has been measured with the Psychological Wellbeing Scale by (Ryff et al., 2018) whereas their academic achievement has been measured while taking their terminal scores of their semester.

Results and Discussion

The Descriptive analysis and Pearson's r along with the Regression analysis was applied.

Table 1
Descriptive Statistics

	M	SD	Skewness	Kurtosis
Prospective Teachers' Growth Mindset	62.39	7.90	-2.11	1.95
Prospective Teachers' Psychological Well-Being	66.64	9.47	-.78	1.96
Prospective Teachers' Self-Efficacy	115.28	25.93	.02	-.49
Prospective Teachers' Academic Achievement	68.89	9.23	-2.17	1.89

It is exhibited in Table 1 that the Mean score of Prospective Teachers' Growth Mindset was M= 62.39, SD= 7.90, Psychological Wellbeing M= 66.64, SD= 9.47, Self-Efficacy M= 115.28, SD= 25.93 and Achievement M= 68.89. Similarly, the Skewness and Kurtosis values for all of the abovementioned was within ± 2 which shows the normal distribution of the concerning data.

Table 2
Correlation of Prospective Teachers' Growth Mind-Set with their Psychological Well-Being

	Prospective Teachers' Growth Mindset	Prospective Teachers' Psychological Well-Being
Prospective Teachers' Growth Mindset	1	.534
Prospective Teachers' Psychological Well-Being		1

$p < 0.05$

A statistically significant and moderate correlation has been identified between the growth mindset of prospective teachers and their psychological well-being as shown by the results that $r = 0.534$ ($p < 0.05$).

Table 3
Regression Analysis Model Summary

R	R Square	Adjusted R Square	df	F	Sig
.534	.286	.284	1	159.03	.000

A variance of 53% ($F = 159.03$, $p < 0.05$) has been found in the Prospective Teachers' Growth Mindset and their Psychological Wellbeing.

Table 4
Coefficient Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
(Constant)	26.63	3.95			8.32	.000
Prospective Teachers' Growth Mindset	.64	.05	.534		12.61	.000

The results exhibit that the Prospective Teachers' Growth Mindset has a moderate effect on their Psychological Wellbeing as $\beta = .53$ with the $p < 0.05$ ($p = .000$).

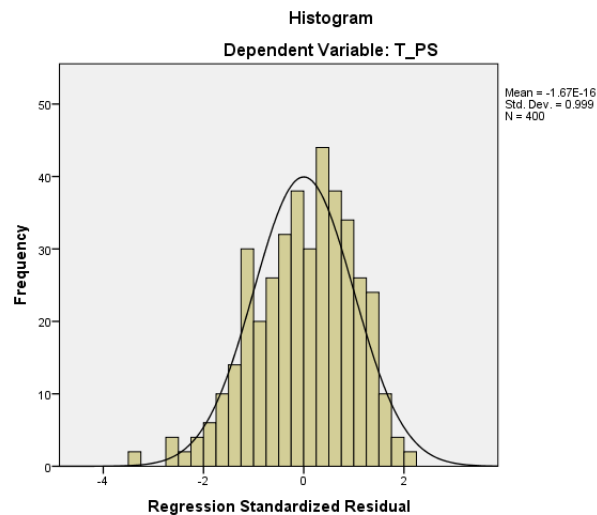


Figure 1 Histogram

Table 5
Correlation of Prospective Teachers’ Growth Mind-Set with their Self-Efficacy

	Prospective Teachers’ Growth Mind-Set	Prospective Teachers’ Self-Efficacy
Prospective Teachers’ Growth Mind-Set	1	.515
Prospective Teachers’ Self-Efficacy		1

$p < 0.05$

There exists a statistically significant and moderate relationship between the growth mindset of prospective teachers and their self-efficacy, evidenced by $r = 0.515$ ($p < 0.05$).

Table 6
Regression Analysis Model Summary

R	R Square	Adjusted R Square	df	F	Sig
.515	.266	.264	1	143.91	.000

A variance of 51% ($F = 143.91$, $p < 0.05$) has been found in the Prospective Teachers’ Growth Mindset and their Self-Efficacy.

Table 7
Coefficient Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.74	8.86		1.09	.000
Prospective Teachers’ Growth Mind-Set	1.69	.14	.515	11.99	.000

The results exhibit that the Prospective Teachers’ Growth Mindset has a moderate effect on their Self-Efficacy as $\beta^2 = .51$ with the $p < 0.05$ ($p = .000$).

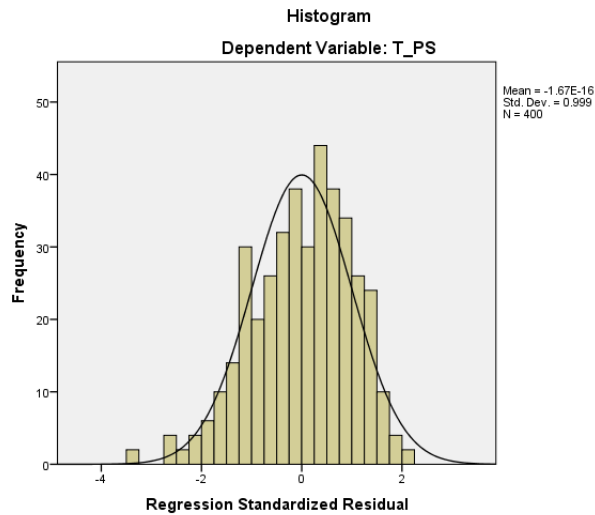


Figure 2 Histogram

Table 8
Correlation of Prospective Teachers’ Growth Mind-Set with their Academic Achievement

	Prospective Teachers’ Growth Mind-Set	Prospective Teachers’ Academic Achievement
Prospective Teachers’ Growth Mind-Set	1	.616
Prospective Teachers’ Academic Achievement		1

$p < 0.05$

A statistically significant and moderate relationship has been identified between the growth mindset of prospective teachers and their academic achievement evidenced by $r = 0.616$ ($p < 0.05$).

Table 9
Regression Analysis Model Summary

R	R Square	Adjusted R Square	df	F	Sig
.616	.379	.378	1	243.39	.000

A variance of 61% ($F = 159.03$, $p < 0.05$) has been found in the Prospective Teachers’ Growth Mindset and their Academic Achievement.

Table 10
Coefficient Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	23.98	2.90		8.26	.000
Prospective Teachers’ Growth Mind-Set	.72	.04	.616	15.60	.000

The results exhibit that the Prospective Teachers’ Growth Mindset has a moderate effect on their Psychological Wellbeing as $\beta^{\wedge} = .61$ with the $p < 0.05$ ($p = .000$).

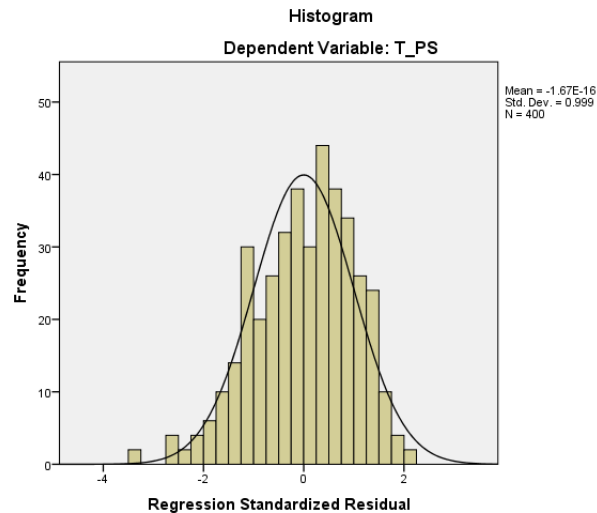


Figure 3 Histogram

Conclusion

This study (Quantitative in nature) has been conducted to investigate the effect of the Growth Mindset on the prospective teachers' Self-Efficacy, Psychological Well-being and Academic Achievement. For this purpose, 400 Prospective teachers have been selected from four universities (including two public and two private) based in Lahore while using the Cluster sampling. The prospective teachers' Growth Mindset has been measured with the help of Growth Mindset Scale developed by Chen et al. (2023) and their Self-Efficacy has been measured with the Academic Self-Efficacy developed by Kunnathodi (2016). Similarly, their Psychological Wellbeing has been measured with the Psychological Wellbeing Scale by (Ryff et al., 2018) whereas their academic achievement has been measured while taking their terminal scores of their semester. The conclusions drawn from the results indicate that the growth mindset of prospective teachers has a moderate impact on their self-efficacy, psychological well-being, and academic achievement.

Recommendations

It has been recommended based on the results that the Growth Mindset should be developed in the Prospective Teachers so that their Psychological Wellbeing, Self-Efficacy and Academic Achievement could be effected positively.

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