



Effect of Academic Self-efficacy and Self-esteem on Students' Academic Achievement in Low-income Families in Pakistan

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Abstract

Although Pakistan is facing critical challenges in ensuring the education of school children; however, children from disadvantaged and low-income families are particularly at risk. Along with improvements in the education system, past research has suggested using students' psychological factors to tackle the challenges like high dropout. Academic self-efficacy and self-esteem are two important psychological factors in this regard. Therefore, the present study aimed to investigate the effect of students' academic self-efficacy and self-esteem on their academic achievement in low-income families in Pakistan. The study is quantitative, the survey method was used and data was collected from elementary school students enrolled in public schools and low-cost private schools. Regression analysis was used to analyze the data. The study found a significant positive effect of both -academic self-efficacy and self-esteem on students' achievement. Implications of the study were discussed.

Keywords: academic self-efficacy; self-esteem; academic achievement; low-income families.



Introduction

Pakistan is facing a grave challenge to ensure all children, particularly, the most disadvantaged, and from low-income families, attend, stay and learn in school. With a projected 22.8 million children aged 5 to 16 not attending school, Pakistan currently has the second-highest number of OOSCs in the world (UNICEF, 2023). Furthermore, according to UNICEF (2023), there are five million children who are not enrolled in school at the primary school age (5 to 9 years) and 11.4 million at the middle school age (10 to 14 years). One of the main reasons for this increase in the number of out-of-school children with age group is the high drop-out rate. The drop-out rate of children from schools particularly, among disadvantaged children is because of several reasons. For instance, gender disparities exist in school drop-out and children from low socio-economic status drops more often than children from families with high socio-economic status.

In this regard, UNICEF is working on multiple aspects with the Pakistani government which includes improving school readiness, and school enrollment, and providing quality and equity in education in various ways. However, they are working mainly on the physical structure and aspects of the education system like school-community partnership, infrastructure, curriculum, etc., and students' psychological factors are ignored. The present study argues that the psychological aspects of students should also be considered an important factor in improving education and decreasing drop-out rates because no one can help a child as much as he/she helps himself/herself. Therefore, the psychological aspects of students should be considered in improving their academic growth. Moreover, UNICEF and generally other local initiatives are working at the macro (community) level to improve the situation of education. However, little focus is given to the efforts which can be done at the micro (school) level.

The present study argued that students' psychological factors can help them to sustain their formal education. For instance, students' academic self-efficacy and self-esteem can help them in accepting the challenges involved in learning. Self-efficacy refers to an individual's belief about their abilities to achieve a particular task or goal, while self-esteem pertains to an individual's overall evaluation of their self-worth and personal value. Self-efficacy is about a person's belief



that he or she can efficiently perform the tasks needed to accomplish a goal (Bandura, 1977). However, academic self-efficacy refers to academic and educational tasks that students need to perform in an educational environment. The present study has mainly focused on academic self-efficacy. Schwarzer (1997) indicated that person with high self-efficacy would invest more effort with persistence and are more resilient and shows more commitment to their goals than those who have low self-efficacy. This is particularly important in an educational environment to avoid challenges like student dropout. Moreover, self-esteem could help students in feeling better about themselves.

Past research has shown that at times students dropped out of school because they couldn't cope with the academic challenges. Generally, students from low socio-economic status are inclined to perceive themselves as less worthy and perceive their abilities as low. Therefore, educational research is interested in recognizing the importance of self-efficacy and self-esteem and aims at promoting them in school systems (John, Andrew & Anna, 2014). It is assumed that children might not perform well at school because they believe that they are less capable. Learning can be a challenging task at times, therefore, learning with persistence can help achieve one's goals. Schwarzer (1997) stated that humans' actions are pre-shaped in their thoughts before they act upon them and their actions are determined by how they perceive themselves or their personality. Therefore, both academic self-efficacy and self-esteem are important constructs in determining one's persistence in working to achieve their goals. School children in general, and students from low socio-economic background particularly needs assistance at school which could result in a reduction in drop-out rate, help students to accelerate their progress, and to ensure completion and transition to higher grades for all students. Hence, it is important to examine the role these constructs play in students' academic performance. Therefore, the present study aimed to investigate the effect of academic self-efficacy and self-esteem on students' academic achievement.

Review of Related Literature

The construct of self-efficacy was first introduced by renowned psychologist Albert Bandura in 1977. It refers to an individual's belief in their ability to accomplish a particular task



or achieve specific goals. According to Bandura (1977), self-efficacy plays a significant role in determining people's motivation, behaviour, and resilience in the face of challenges. Bandura argued that self-efficacy beliefs are formed through a combination of personal experiences, observation of others, and social persuasion. Over the years, Bandura's work on self-efficacy has been widely recognized and has had a profound impact on the field of psychology. Researchers have expanded upon his theories and applied them to various domains. Self-efficacy is associated with many variables, for instance, job performance, mental health, well-being, and academic achievement.

Educators have incorporated self-efficacy principles into their teaching strategies to enhance students' motivation and performance. By fostering a belief in their abilities, educators can help students overcome obstacles and develop resilience. This approach has been particularly effective in promoting learning and achievement in students facing academic challenges or who belong to low-income families. In the realm of sports, self-efficacy has been shown to influence athletes' performance and persistence. Athletes with high self-efficacy are more likely to set challenging goals, exert effort, and persist in the face of setbacks. Coaches often employ strategies to enhance athletes' self-efficacy, such as providing constructive feedback, modelling successful behaviors, and creating a supportive team environment. Empirical work on self-efficacy has paved the way for a deeper understanding of how self-beliefs influence human behavior and achievement.

Now it will be investigating how self-efficacy, as a belief in one's capabilities to accomplish tasks and achieve desired outcomes, plays a crucial role in human functioning. It has been extensively studied and has been found to have a significant impact on various aspects of human behavior and performance. Firstly, self-efficacy influences motivation. When individuals possess high levels of self-efficacy, they are more likely to set challenging goals and be motivated to put in the effort required to attain those goals. They believe in their ability to overcome obstacles and persist in the face of difficulties. On the other hand, individuals with low self-efficacy are usually uncertain about their abilities and may experience little or no motivation, leading to reduced effort and performance.



Secondly, academic self-efficacy affects cognitive processes. Individuals with high self-efficacy tend to approach tasks with a positive mindset, viewing challenges as opportunities for growth rather than threats. They are more likely to engage in active problem-solving strategies, use effective coping mechanisms, and exhibit greater resilience in the face of setbacks. In contrast, individuals with low self-efficacy may experience self-doubt, and anxiety, and may engage in avoidant behaviors, hindering their cognitive processes and overall functioning. Furthermore, self-efficacy influences emotions and well-being. Believing in one's capabilities promotes positive emotions such as confidence, self-worth, and satisfaction. It can buffer against stress and anxiety, as individuals with high self-efficacy perceive stressful situations as manageable and are more likely to engage in effective coping strategies. In contrast, individuals with low self-efficacy may experience increased levels of stress, self-doubt, and negative emotions, which can adversely impact their overall functioning and well-being.

Additionally, self-efficacy has implications for skill development and performance. Individuals with high self-efficacy are more likely to engage in skill-building activities, seek out growth opportunities, and persist in mastering new tasks. They are more likely to exhibit better performance outcomes across various domains, such as academics, sports, and professional settings. Conversely, individuals with low self-efficacy may avoid challenging tasks, experience performance anxiety, and may struggle to achieve their full potential.

In conclusion, self-efficacy significantly influences human functioning. It affects motivation, cognitive processes, emotions, skill development, and performance outcomes. Individuals with high self-efficacy tend to exhibit greater motivation, resilience, and positive emotions, and achieve better performance, while those with low self-efficacy may experience diminished motivation, cognitive impairments, negative emotions, and underperformance. Recognizing and fostering self-efficacy can have profound implications for personal growth, success, and overall well-being. The support and feedback students receive from teachers and peers are also important in shaping academic self-efficacy. Positive and constructive feedback, encouragement, and recognition of student's efforts can boost their self-efficacy beliefs. Conversely, negative feedback or lack of support can undermine self-efficacy and hinder academic



performance. Therefore, the present study assumed that self-efficacy can improve students' performance in low-income families.

Self-esteem is an older concept than self-efficacy, Rosenberg (1965) defined self-esteem as the presence of a continued sense of personal worth. Moreover, self-esteem is a matter of degree and is measured as high or low self-esteem. High self-esteem and low self-esteem are distinct psychological states that significantly influence individuals' thoughts, emotions, and behaviors. Understanding the characteristics associated with each can provide insights into how self-esteem impacts various aspects of life. It is important to note that self-esteem can fluctuate and be influenced by a range of factors, but the following are common characteristics associated with high and low self-esteem. A *positive self-image* is a characteristic of high self-esteem and generally, people with high self-esteem have a positive perception about themselves. They value their abilities, qualities, and accomplishments, and have confidence in their worth and value. *Resilience* is the next characteristic of high self-esteem, people having high self-esteem are usually more resilient and don't lose hope quickly, they bounce back from setbacks or failures. Individuals with high self-esteem are more likely to view challenges as opportunities for growth and learning rather than as threats to their self-worth. Further, individuals with high self-esteem tend to be *assertive* and confident in expressing their opinion and needs. They have a strong sense of self and are comfortable asserting themselves in interpersonal interactions. Moreover, high self-esteem is associated with setting *healthy boundaries* in their relationships. They have a clear understanding of their own needs and rights, and they prioritize their well-being while respecting the boundaries of others. Finally, individuals with high self-esteem are *proactive* in setting and pursuing their goals. They are motivated, driven, and believe in their ability to achieve success.

Similarly, people with low self-esteem don't hold a positive image of themselves, they see themselves as less, they lack resilience, lose hope quickly and change paths in case of failure. Furthermore, they are less assertive and shy to show their opinions and needs, they couldn't set healthy boundaries in their social relations and therefore, are not very successful in their interpersonal relations. They cannot set goals, and use proper and timely techniques to achieve them.



Recent Research on Self-efficacy and Self-esteem

Past research has found that generally, factors like self-efficacy and self-esteem are related to individuals' overall health and well-being. Mikkelsen et. al. (2020) did a cross-sectional study to investigate the association between health-related quality of life and self-efficacy, self-esteem, loneliness, and stress in secondary school students and found a positive association among them. Moreover, Chen et. al. (2020) stated that this age group lacks self-control and time management skills therefore, it is important to investigate their self-efficacy and self-esteem with different aspects of their lives. Therefore, they measured the association between self-efficacy, self-esteem, and internet addiction and found that students with low self-efficacy and self-esteem were more prone to internet addiction in Taiwan. Mao, et. al (2020) measured the role of flow in anxiety, academic performance, academic self-efficacy, and self-esteem in building psychological sustainability and resilience. They found that flow negatively predicted anxiety and this effect is mediated by both self-esteem and self-efficacy. With the help of these findings, we can conclude that self-efficacy and self-esteem could be related to student's academic performance too because these studies have found that these factors are significantly related to factors like health, well-being, stress, pain, etc. and this association differs on the basis of family factors.

Ullah, et. al. (2020) conducted a study to measure the role of self-efficacy on academic performance among college students. The sample of the study was comprised of male students and data was collected using a questionnaire. The study found no significant relationship between self-efficacy and academic performance. However, Akram and Ghazanfar (2014) measured the relationship between self-efficacy and student performance among university students. The data was collected using a self-developed questionnaire on self-efficacy, comprising four aspects of self-efficacy. The results showed a significant positive relationship between self-efficacy and performance. Their findings were in contrast with the findings of Ullah, et. al. (2020) whose study didn't find any correlation between self-efficacy and performance.

Javed and Tariq (2016) measured the association among self-esteem, self-efficacy, and career decision-making among students of universities in the city of Lahore. Their study found that both self-efficacy and self-esteem are negatively correlated with career decision-making



difficulties. This implies that students having high self-efficacy and/or self-esteem were confident while taking career decisions and didn't face any difficulties while deciding on their careers.

Research on self-esteem has shown that self-esteem and academic achievement are differently linked among different groups based on their demographic variables (Cooper & Bouvrette, 2003; Crocker & Wolfe, 2001). Hope, et. al. (2013) investigated self-esteem and achievement patterns among 374 black college students at the beginning and end of freshman year. Multivariate analysis revealed four types of different profiles among the sample and how self-esteem and academic achievement are associated among students with different profiles. Therefore, it can be concluded that constructs like self-esteem affect students' academic achievement differently across student factors and demographic factors. Based on these findings, the present study assumed that self-esteem will affect students' achievement differently in low-income families. Tus (2020) investigated the effect of self-concept, self-esteem, and self-efficacy on senior high school students doing multiple regression analyses in the Philippines. The author found that there was no significant effect of all three factors related to self on students' academic performance.

Schmidt and Padilla (2003) studied the effects of self-esteem and family challenges on students' academic performance and participation in co-curricular participation using National Educational Panel data. The study found that self-esteem was not linked to academic grades, however; the family challenge was associated with academic grades. Wang, et. al (2021) investigated parent-child cohesion, self-esteem, and student academic achievement by measuring the reciprocal relationship between them at the elementary school level. The study employed a longitudinal design from grade 4 to grade 5 by measuring the variables on 6 occasions. The study found that self-esteem and academic achievement transactionally facilitated each other, and self-esteem enhanced mother-child cohesion.

Abdulghani, et. al. (2019) measured the relationship between self-esteem and academic achievement across multiple science groups at the college level in Saudia Arabia and found that self-esteem is positively associated with academic achievement. Furthermore, Ugwuanyi, et. al. (2020) measured the effect of multiple psychological factors on students' academic achievement



among senior secondary school students in Nigeria. These factors include; self-esteem, self-efficacy, and emotional intelligence, and found that all these three constructs are significant determinants of students' academic achievement.

Therefore, it can be concluded that studies about self-efficacy and self-esteem done in recent years in many countries, and also the subject is being studied in the context of Pakistan. The result of the studies has shown that generally, self-efficacy and self-esteem have a positive effect on academic achievement however, the results are inconclusive, particularly in the context of Pakistan, where most studies showed little or no relationship between these variables. Furthermore, the present study has measured the effect of academic self-efficacy and self-esteem in low-income families.

Research Questions

RQ#1. What is the effect of academic self-efficacy on students' academic achievement?

RQ#2. What is the effect of self-esteem on students' academic achievement?

Methods and Measures

The present study is quantitative in nature and used a descriptive research design. The data was collected using a survey, and a questionnaire was used to collect the data. The questionnaire was comprised of three sections; the first section measured demographic information about students' gender, age, percentage in last examinations, parents' education, and monthly income. The second section collected data on academic self-efficacy using a self-developed scale. The scale was adapted from Schwarzer (1996) general self-efficacy scale. The reason behind adopting the scale is that Schwarzer scale measured general self-efficacy, however, the present study has measured academic self-efficacy. General self-efficacy measured one's optimistic beliefs about coping in life, however, academic self-efficacy measured one's efficacy beliefs, particularly in relation to academics. The reliability of the present scale was measured as .78 Cronbach alpha.

The third section measured information about students' self-esteem using the Rosenberg self-esteem scale (RSE) (Rosenberg, 1965). The scale comprised 10 items with a 4-point Likert-



type rating scale (1 = strongly disagree to 4 = strongly agree). The scale includes items like “I certainly feel useless at times” showing low self-esteem and items like “On the whole, I am satisfied with myself”, the scale originally reported a reliability of .85. however, in the present study the reliability of the scale was .79. The Rosenberg self-esteem scale is used widely in past research and is an authentic tool to measure self-efficacy, it also correlates significantly to other self-esteem measures, particularly the Coppersmith self-esteem inventory.

After finalizing the instruments of the study, the sample was drawn. The details about the sample are given in the sampling section. The authors have collected the data and administered the questionnaire in schools. After data collection, data were analyzed using the software SPSS 26. Linear regression was performed to measure the effect of students’ academic self-efficacy and self-esteem on their academic achievement.

Sample of the Study

The sample of the study was drawn from public and low-cost private elementary school students. The multi-stage sampling technique was used to draw the sample, at the first stage schools were selected using a random sampling technique from the city of Faisalabad. In the second stage, students were randomly selected from schools. Students from grades 5,6,7 and 8 were included in the study. In each class, students were asked about their consent to participate in the study. Among students who showed interest in participating in the study, 10 students were randomly selected from each class. The total sample comprised 652 students (337 male and 315 female), 350 students from public schools, and 302 from low-cost private schools were selected. The demographic details of the sample are given in Table 1. The confidentiality and anonymity of the data were ensured. It is important to note that as the aim of the study was only to measure the effect of academic self-efficacy and self-esteem in low-income families, therefore, two parameters were used to select students. Students only from public schools and low-cost private schools are included in the study, as parents with low incomes cannot afford expensive private schools. Furthermore, among the selected schools, only those students data is included in the study whose parents’ income is less than rupees 30,000 per month. Therefore, students who reported their parents’ income as higher than 30,000 rupees were not included in the present study.



Table 1

Demographic characteristics of the sample of the present study.	
Characteristics	Frequency in percentage
Gender	
Male	51.68 (%)
Female	48 (%)
School type	
Public school	53.68 (%)
Low-cost private school	46.31 (%)
Students' Age	
11 years	25 (%)
12 years	39 (%)
13years	25 (%)
14 years	11 (%)

Results

The data was analyzed in SPSS 26. Regression analyses were performed to measure the effect of students' academic self-efficacy and students' self-esteem on their academic performance. The demographic information of the sample is given in Table 1. The results of descriptive analyses are given in Table 2.

The study found that generally, students reported low to moderate self-esteem and self-efficacy. Male students (Mean = 25.57) reported slightly higher self-efficacy than female students (Mean = 23.53). Similarly, male students (Mean = 26.34) reported higher self-esteem than female students (22.78). However, the difference was only slightly significant.

Table 2



Descriptive statistics on students' age, self-efficacy and self-esteem

	Mean	SD
Age	12.5	1.50
Self-efficacy	24.51	4.57
Self-esteem	23.36	5.46

The results of the regression analysis of self-efficacy are shown in Table 3. It is found that self-efficacy has a moderately significant positive effect on students' academic achievement which shows that self-efficacy significantly predicts students' academic performance. Self-efficacy in total explained 16% of the total variance in students' academic achievement which is quite a good percentage in total achievement for any psychological construct. Therefore, it can be interpreted that if students' self-efficacy would be high, it would help them in performing better in academics.

Table 3

Standardized regression weights for the specified regression analysis to measure the effect of students' self-efficacy on their academic achievement

Construct	β	SE
Self-efficacy	.32*	.09
R ²	16	

*p < .05

The results of the regression analysis of self-esteem are shown in Table 4. It is found that self-esteem has a moderately significant positive effect on student's academic achievement. Results showed that ones' higher self-esteem is significant for their academic performance. Self-esteem in total explained 14% of the total variance in students' academic achievement which is a quite good percentage in total achievement for any non-cognitive construct. Hence, it can be concluded that in low-income families, psychological constructs like self-esteem holds significant importance for their academic achievement.



Table 4

Standardized regression weights for the specified regression analysis to measure the effect of students' self-esteem on their academic achievement

Construct	β	SE
Self-esteem	.29*	.08
R ²	14	

*p < .05

Conclusions and Discussion

In the present study, the effect of academic self-efficacy and self-esteem was examined in low-income families. The study found that academic self-efficacy and self-esteem were significant predictors of student's academic achievement in low-income families. Academic self-efficacy explained 16% of the total variance and self-esteem explained 14% of the total variance, which means both constructs together explained 30% of the total variance. The previous studies in the context of Pakistan showed mixed results for instance, some studies showed a positive relationship between self-efficacy and academic performance while others didn't show any significant relationship. For instance, Ullah, et. al (2020) found no significant relationship between self-efficacy and academic performance. On the other hand, Akram and Ghazanfar (2014) found a significant positive relationship between self-efficacy and achievement. In studies about self-esteem, AbdulGhani (2019) found a significant positive relationship between self-esteem and performance and Ugwuanyi (2020) found a positive relationship between self-esteem, self-efficacy, and academic performance. Therefore, the findings of the present study contributed useful empirical evidence.

Moreover, no such study was found done in the Pakistani context which has measured the effect of self-efficacy and self-esteem in low-income families. The present study aimed to measure the significance of the said constructs in the context of Pakistan in low-income families because Pakistan is facing serious challenges of low enrollment and high dropout rates in schools. The findings of the present study are in line with the findings of (Cooper & Bouvrette, 2003; Crocker



& Wolfe, 2001; Hope, et. al., 2013) who found that self-esteem and academic achievement are differently linked among different groups based on their demographic variables. The present study provides one more piece of such evidence. Therefore, the present study suggested focusing on students' psychological factors along with structural variables because issues like high dropout, lack of decent work and poverty are mainly problems of low-income families.

Implications and Recommendations

Based on the findings of the present study, it is suggested that students from low-income families should be treated differently at schools; teachers should work more on developing psychological factors like self-efficacy and self-esteem in them. Their social and family backgrounds lack in developing such constructs in them, it's might also because they are less educated and expect less from their children. Therefore, teachers of students from low-income families should play their part. Teachers can do counselling of students that how they should believe in themselves and their abilities. Furthermore, they should see themselves as worthy beings. It is expected that it would help them in developing better self-related variables like self-esteem and self-efficacy which could eventually help them in better academic performance. In this way, national issues like high drop-out rates, and poverty could be resolved and children from low-income families will have access to decent work in the long run.

Limitations of the Study and Future Directions

Although the present study has added significant empirical evidence to the past body of research, there are some limitations. The present study didn't control for variables like students' intelligence while conducting the analyses. Future studies can consider controlling such variables. Moreover, the present study didn't compare the effect of academic self-efficacy and self-esteem among different social classes, future research can work in this direction.



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