

Relationship between Students' Self-Efficacy and Resilience at Secondary School Level

Sabeen Qamar* and Mumtaz Akhter**

Abstract

The relationship between secondary school students' self-efficacy and resilience was studied in the Faisalabad District. The study sample was drawn from both genders, and in urban and rural locales. Translated versions of scales were used to measure students' self-efficacy and resilience. Four hundred students responded to the questionnaires during the researcher's visits to sample schools. The results of the study show that students had high levels of self-efficacy beliefs and resilience. Gender differences were also observed in the analysis. No significant difference was observed in self-efficacy level of urban and rural students. A strong positive relationship was found between self-efficacy and resilience in the study. Future research can be conducted using mixed method or longitudinal studies.

Keywords: Self-efficacy, resilience, relationship, risk factor, protective factor

* PhD Scholar, Institute of Education and Research, University of the Punjab, Lahore
Email: sabeenqamar2002@gmail.com

** Professor, Institute of Education and Research, University of the Punjab, Lahore
Email: drmumtazakhter@hotmail.com

Introduction

Children learn best from their environment and become lifelong learners by experiencing and overcoming the hardships of life. Education polishes students' skills and their cognitive and non-cognitive competencies are enhanced. Personal, individual and social traits grow best with the development of emotional and affective domain. Believing in one's own capabilities to accomplish a positive outcome is generally termed as self-efficacy, as noted in social cognitive theory (Bandura, 1994, 1997, 2000, 2004, 2008, 2009, 2010). Self-efficacy involves the interplay of human feelings, thinking, motivation and behavior in particular situations. Individuals with a high level of self-efficacy within a situation typically display greater achievement and comfort in any number of ways. They are able to perceive tough situations or tasks as opportunities for learning rather than avoiding more difficult matters. This, in turn, can enhance their lives, and they can advance positively in life. They tend to appear competent, and in times of setback or failure, they regain their equilibrium quickly.

Efficacious students attribute their failures to lack of efforts, insufficient knowledge and deficient skills needed for success. At times of test and trail they are confident enough to overcome hardships. With such a positive mindset, they are ready to accomplish things with reduced stress and anxiety. They perform better due to their belief in themselves to master the situation, and to yield advantageous consequences (Santrock, 2011).

According to Schunk (2008), self-efficacy stimulates the choice of activities of the learner. The learners who are at low level of self-efficacy dodge learning many tasks--particularly the difficult ones. On the other hand, students with higher self-efficacy levels love to face challenging tasks. They demonstrate more effort and persevere in learning the tasks at hand so as to achieve successful outcomes. Betz (2004) asserted similar views about highly efficacious students, stating that students with high efficacy explore more inspirational professional choices than their counterparts.

The efficacy of a person can be influenced by four different but related sources according to Bandura (1986, 1997). It includes performance (mastery) experiences, vicarious experiences, verbal encouragement and physiological status. As saying goes, nothing succeeds like success; so, success in a task produces a strong belief in one's efficacy.

On the other hand, failure can weaken it for a while. Individuals who do not achieve success can take some time to regain balance especially if trying too hard in the face of difficulties when attempting to overcome failure. This is often a momentary phase in one's progress. Successful learners learn and even reflect on not gaining success as an integral part of their experience in that particular situation and use it in another situation to gain success. This momentum develops the individual and helps them become more

effective in the accomplishment of tasks and assignments at hand. The energy level of such individuals is high, and satisfaction is achieved with the level of attainment (Bandura, 1994).

As noted, self-efficacy beliefs of people influence the choice of activities they select. It often correlates to their effort levels in carrying out engagements and their resolution to face hard situations. In the context of scholastic or academic achievement, if students enroll themselves according to their positive beliefs about a particular subject and their effort level, they can achieve better grades. According to Bandura (1995), those learners who show higher level of self-efficacy beliefs, consider academic tasks as additional challenges, that are dealt competently because of their beliefs in attained skills and knowledge. It is due to their strong self-efficacy that they are capable of putting forward strong efforts, show determination to manipulate circumstances and achieve success in challenging tasks, and thus mastering difficult tasks rather than avoiding the learning opportunity presented to them (Bandura, 1997). While describing people with lower levels of efficacy, Pajares & Schunk (2002) consider duty and job-related matters as stress-breeding opportunities that weakens a person's self-efficacy resulting in lower job performance, and over time may consider every challenge an unbearable experience. When this situation arises, the task at hand is considered a waste of time, motivation sinks, and a person becomes cynical. Their mindset becomes detrimental for the organization and instead of becoming a productive worker, they become a skeptic. This is why self-efficacy is considered to be a powerful prevailing predictor for achievements of people.

According to Bandura (1997), human goals are regulated by the self-efficacy beliefs of people. As people judge their effort level, endurance and resiliency in times of hindrance so they set their goals in life accordingly. Emotional levels are also adjusted according to situations. Those who have high level of self-efficacy know their management skills and successfully alter the difficult times. On the contrary, people with low self-efficacy beliefs are expected to magnify threats, risks or challenges.

Self-efficacy plays a pivotal role in human thinking. It guides people in elimination of all distractions and negative mindset so that full concentration is employed towards successful accomplishment of goals. The higher the level of self-efficacy beliefs, the better will be achievement. Those who have low self-efficacy beliefs are doubtful about their abilities and perform very low rather poorly at the tasks at hand (Bandura, 1997).

The role of teachers become very important at this stage in the life of learners when they feel low on self-efficacy beliefs. The teachers can divide difficult parts of their lesson into small components with presenting easy tasks in the start and give positive feedback and continuous encouragement to boost their efficacy level.

There has been a lot of research on the construct of self-efficacy in many domains from the days of its early inception of Bandura's (1977) social cognitive theory. It has been thoroughly researched in students' academic related aspects. Many factors related to formulation of self-efficacy of students to learning include setting up goals, modeling, feedback, encouragement, rewards and information processing etc. These factors not only affect self-efficacy of learners but also help in its increase (Alderman, 1999).

Education is more than the basics of being able to read, write or to do calculations. It is producing life skills in a learner to live a better life in ever changing circumstances where the best option is survival of the fittest. Education plays a role of buffer and a contributor towards a better life (Truebridge, 2014). A word that has become popular in lexicon of the day is resilience (Truebridge, 2016). The term resilience encompasses both the individual and the situation. Resilience is a compelling concept and it deals with beliefs. Beliefs are mindsets and it is the mindset that guides human life. Resilience is not a trait rather it is a process but it can become a personality trait with passage of time. Everyone can become resilient as all have capacity to do so. There are certain events that can alter the life of a person and there are people who can change the life of another individual such as a teacher, friend or any other close by who can make a difference. At times one's resolution at difficult moments in life shapes confidence and results in a strong and stable personality that breeds a resilient sense of self-efficacy.

Benard (2004), considered resilience a process by developing its theory. This theory portrays resilience alike to Maslow's (1943) theory of human needs including safety, belonging, love etc. The theory also highlights three factors considered as protective ones, including development of caring relations, maintenance of high hopes or expectations and provision of meaningful prospects of participation and positive contribution. According to Benard (2004), the presence of these three protective factors in any environment become ideal for the growth and cultivation of resilience in the individual. The environment may include home, community, school or peer groups etc. Any protective factor can help in nurturing resilience of an individual in one environment and the presence of other protective factor in some other environment can lead to development of resilience, but the combination of all three can lead to a successful and durable resiliency among the individuals. These three protective factors play compensatory role in the absence of one or the other factor in any environment, for example in the school, family or community.

These protecting factors provide not only developing support and prospects in times of adversary, traumas or shocks but also alleviates the pains in hard times and provide necessary cushion to regenerate courage to face these hard times. They inculcate personal competencies including social skills needed for building relations, problem-solving abilities, thinking critically, positivity, efficacy beliefs, motivation and a sense of autonomy etc. After having developed these protecting factors, an individual has changed mindset where he becomes a resilient being who looks every adversary a challenge and bounce backs accordingly.

Dweck (2006) discussed two types of mindsets; fixed mindset and the growth mindset. Those people who are categorized as fixed mindset believe that their capacities and characters including talents, intelligence, and personalities are static, fixed and are unchangeable. So, whatever is the outcome of the task, they walkout the situation.

Alternatively, growth mindset people have faith in their abilities, capabilities and talents that these are flexible enough that these can be polished by their personal hard work. Their efforts transform them into a get going attitude to achieve higher level challenging tasks. This makes them an optimistic and determined worker that never resign challenging tasks for themselves. She briefly expressed her perception on mindsets in simply expressing that “Mindsets are just beliefs. They’re powerful beliefs, but they’re something in your mind, and you can change your mind” (Dweck, 2006, p. 16).

Human beliefs truly influence human practices (Truebridge, 2014). Self-efficacy beliefs, if have positive and strong influence make individuals resilient. Resilience is the ability, skill or aptitude to combat back in the face of odds and adversaries and that ability gets its faith and belief, in success from efficacy. For becoming a resilient individual, one needs to have strong faith and belief in one’s own abilities. The capacity to handle challenges is a process which is dynamic (Sagone_& De Caroli, 2013).

Qamar and Akhter (2019), considered resilience as an attitude that involves thoughts, emotions and behaviors. It is not static or incidental, it is progressive and continues to strengthen with life. They further explored the risk factors affecting academic resilience of elementary students. According to Mirza and Arif (2018), some children survive in the odd times while many others not only survive but also flourish and develop as well. Resilience does not mean to deal with survival aspect of life only. There are many people who survive in times of misfortunes and others who not only survive but prosper too. When a man is faced by adversities and he/she if only handle and survive in that situation does not become resilient. Those who cope, develop and prosper, no matter what the situation is, and survive in face of odds, successfully, are resilient.

Resilience is the ability, it is the attribute and quality that one can develop, and it is dynamic and lifelong. It is a process and one can, if one wishes to, enhance it depending on one’s potential to prosper and progress in life. Self-efficacy is one’s faith in one’s ability to prosper and progress in the face of all misfortunes. It is task and situation oriented. Whereas, resilience is individual’s belief in his/ her potentials. Resilience can be developed keeping in mind how much self-efficacious an individual is or can become with passage of time.

The Present Study

Methodology

The study was designed as descriptive survey in secondary school population in the district of Faisalabad to describe the existing conditions of self-efficacy and resilience among the students. The objectives of the study were to study the self-efficacy beliefs and resilience level of boys and girls studying in 10th grade. Another objective of the current study was to find out the relationship between self-efficacy and resilience of students at secondary level.

The data were collected from both genders of urban and rural locales. Eight schools were selected randomly from Faisalabad district keeping in mind the rural representation in the sample. Both constructs were measured through questionnaires. The translated version in Urdu was used to measure perceptions of boys and girls.

Self-efficacy questionnaire for children (*SEQ-C-24*) developed by Muris (2001) was used to measure self-efficacy of the students. The reliability of this questionnaire calculated in the study was 0.801. The child and youth resilience measure (*CYRM-28*) youth version developed by Resilience Research Centre was used to measure resilience of the students. The reliability of this questionnaire calculated in the study was 0.811.

Findings of the Study

Table 1 describes distribution of sample of the study. There were four hundred students that took part in the study.

Table 1
Gender and Locale Wise Distribution of the Sample

Variables	N
Gender	
Girls	172
Boys	228
Locale	
Urban	252
Rural	148
Total	400

Table 2 describes gender wise self-efficacy beliefs of participants of the study. Independent samples t-test was used to measure self-efficacy beliefs of boys and girls.

Table 2
Gender Wise Self-Efficacy Beliefs of Students

Gender	N	M	SD	df	t	p
Girls	172	93.90	10.27	398	-2.103	0.036*
Boys	228	95.92	8.91			
	400					

* $P \leq 0.05$

Table 2 shows that there is statistically significant mean difference in self-efficacy of girls (M= 93.90, SD= 10.27) and boys (M= 95.92, SD= 8.91); $t(398) = -2.103$, $p = 0.036^*$. The table further describes that boys (M= 95.92) are more self-efficacious than girls (M=93.90).

Table 3 describes locale wise self-efficacy beliefs of participants of the study, Independent samples t-test was used to measure self-efficacy beliefs of urban students and rural students.

Table 3

Locale Wise Self-Efficacy Beliefs of Students

Locale	N	M	SD	df	t	p
Urban	252	95.48	9.48	398	1.147	0.252
Rural	148	94.34	9.68			
	400					

* $P \leq 0.05$

Table 3 shows that there is no significant mean difference in self-efficacy of urban (M= 95.48, SD= 9.48) and rural students (M= 94.34, SD= 9.68); $t(398) = 1.147$, $p = 0.252$. The table further describes that urban students (M= 95.48) are more self-efficacious than rural students (M=94.34).

Table 4 describes gender wise resilience beliefs of participants of the study, Independent samples t-test was used to measure resilience beliefs of boys and girls.

Table 4

Gender Wise Resilience Beliefs of Students

Gender	N	M	SD	df	t	p
Girls	172	117.02	15.71	398	-2.857	0.004*
Boys	228	120.86	11.16			
	400					

* $P \leq 0.05$

Table 4 shows that there is statistically significant mean difference in resilience of girls (M= 117.02, SD= 15.71) and boys (M= 120.86, SD= 11.16); $t(398) = -2.857$, $p = 0.004^*$. The table further describes that boys (M= 120.86) are more resilient than girls (M=117.02).

Table 5 describes locale wise resilience beliefs of participants of the study, Independent samples t-test was used to measure resilience beliefs of urban students and rural students.

Table 5

Locale Wise Resilience Beliefs of Students

Locale	N	M	Sd	Df	t	p
Urban	252	120.29	13.20	398	2.11	0.035*
Rural	148	117.37	13.65			
	400					

* $P \leq 0.05$

Table 5 shows that there is statistically significant mean difference in resilience of urban students ($M = 120.29$, $SD = 13.20$) and rural students ($M = 117.37$, $SD = 13.65$); $t(398) = 2.11$, $p = 0.035^*$. The table further describes that urban students ($M = 120.29$) are more resilient than rural students ($M = 117.37$).

Pearson product-moment correlation coefficient was computed to find out relationship between self-efficacy and resilience of students at secondary school level.

Table 6

Correlations between Self-Efficacy and Resilience

Self-Efficacy	Resilience	
	Correlation Coefficient	0.720**
Sig. (2-tailed)	0.000	
N	400	

** $P \leq 0.01$, * $P \leq 0.05$

Table 6 shows that there was a strong, positive and significant relationship between self-efficacy and resilience was observed.

Conclusion and Discussion

Self-efficacy belief is not an inherited feature of any human, but rather develops with time and with every learning experiences one goes through it. In this study, which is a prologue of PhD dissertation, comprised the sample of a single district representing all features of the main study depicts a strong, positive and significant relationship between students' self-efficacy beliefs and resilience.

People have different areas of life in which their sense of efficacy is being nurtured. As it is a task specific domain, teachers must be aware of their students not only about their general wellbeing but also in learning specific situations. Self-esteem and self-efficacy are inter-related constructs. What a student thinks he/she is capable of achieving is different from what he/she thinks he/she is of worth. A student may be having a high self-esteem level but feel low efficacious in mathematics and science subjects. Similarly, he/she can be having low self-esteem but feel efficacious on arts and music.

One finds high level of self-efficacy beliefs in boys in comparison to girls. The same trend can be seen while comparing resilience between boys and girls in the sample. Looking at the analysis, one can deduce that urban students are more self-efficacious and resilient as compared to rural students. Many reasons can be inferred from this analysis. The study is conducted in an orthodox culture of Islamic republic of Pakistan, which is after all a gender biased community. Being a male dominated society, it is obvious that boys are groomed in family with domination. They are considered as sole bread earner of the family so from the early days of their birth they are given more importance than girls in the family. In rural areas of the country, birth of a boy is celebrated more exuberantly than the vice versa. Self-efficacy can be best observed in the social fabric of society. All the religious festivals, societal rituals, local customs, norms and ceremonies have male domination in Pakistan. This picture can be seen in our results where we find boys dominating girls in terms of efficacious beliefs.

The availability of more facilities in cities as compared to rural areas have given rise to urbanization. The burden of population moving towards cities in pursuit of comforts is shifting the balance between the urban-rural divide. The efficacy beliefs and resilience of urban students outclassed the rural population.

The positive adaptation of urban students to live in limited resources and succeed in hard times and carry this learning throughout future life has what made them resilient in their approach towards life. In a country like Pakistan, where life is not a simple phenomenon; one has to be competent enough to survive in a war trodden society. The societal fabric is torn due to long and difficult times in the country due to imposed wars, natural calamities in the face of floods, earthquakes and other natural disasters, Soviet invasion of Afghanistan, war on terrorism, poverty, hunger, diseases, lack of resources, corruption, nepotism, and the pandemic of Covid-19 etc. are few and sundry events that have shaped the population in the country.

In this research, we found a strong, positive and significant relationship between students' self-efficacy beliefs and resilience. All empirical studies have some limitations. The present study is limited in its sample size as only one district was focused for data collection. Future research/ researchers can adopt mixed method or can expand the depth of examining the relationships using more than two variables. They can use a longitudinal rather than cross sectional approach for achieving prospective results.

References

- Alderman, M. K. (1999). *Motivation for achievement: Possibilities for teaching and learning*. Mahwah, NJ: Erlbaum.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Bulletin*, 84, 191-215.

- Bandura, A., Adams, N. E., & Beyer, J. (1977). Cognitive processes mediating behavioral change. *Journal of Personality and Social Psychology*, 35, 125-139.
- Bandura, A. (1986). *Social foundation of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Bandura, A. (1989). *Social cognitive theory*. In R. Vasta (Ed.), *Annals of child development*. Vol. 6. *Six theories of child development* (pp. 1-60). Greenwich, CT: JAI Press.
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational behavior and Human Decision Processes* 50 (248-287).
- Bandura, A. (1994). *Self-efficacy*. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998).
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman.
- Bandura, A. (2010). *Self-Efficacy*. In the *Corsini Encyclopedia of Psychology* (eds I.B. Weiner and W.E. Craighead). Doi:10.1002/9780470479216.corpsy0836
- Benard, B. (2004). *Resiliency: What we have learned*. San Francisco, CA: West Ed.
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.
- Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370–396.
- Mirza, M. S., & Arif, M. I. (2018). Fostering academic resilience of students at risk of failure at secondary school level. *Journal of Behavioral Sciences*, 28 (1). 33-50.
- Pajares. F. & Schunk, D. (2002). *Self and Self-belief in Psychology Education: A Historical Perspective*. Academic Press: New York.
- Qamar, S., & Akhter, M. (2019). Risk factors affecting academic resilience of elementary students. *Middle-East Journal of Scientific Research*, 27(8), 637-643
- Sagone E., & De Caroli M.E. (2013). Relationships between resilience, self-efficacy, and thinking styles in Italian middle adolescents. *Procedia – Social and Behavioral Science*, 92, 838-845.
- Santrock, J.W. (2011). *Child Development* (13th Ed.). New York: McGraw-Hill.
- Truebridge, S. (2014). *Resilience begins with beliefs: building on student strengths for success in schools*. New York: Teachers College Press.
- Truebridge, S. (2016) Resilience: It begins with beliefs, *Kappa Delta Pi Record*, 52(1), 22-27, DOI: 10.1080/00228958.2016.1123041