



## Impact of Anxiety on Self-esteem, Self-concept and Academic Achievement among Adolescent

**Dawood Nawaz**, Associate Lecturer at Department of Public Administration, The Islamia University of Bahawalpur, Pakistan. [dawood.nawaz@iub.edu.pk](mailto:dawood.nawaz@iub.edu.pk)

**Nazia Jahangir**, Lecturer at Department of Psychology, Institute of Southern Punjab, Multan, Pakistan, [naziajahangir4@gmail.com](mailto:naziajahangir4@gmail.com)

**Dr. Umbreen Khizar**, HOD at Department of Psychology, Institute of Southern Punjab Multan, Pakistan, [umbreenkhizar@gmail.com](mailto:umbreenkhizar@gmail.com)

**Hashmoonah John**, MPhil Scholar at Department of Psychology, Institute of Southern Punjab, Multan, Pakistan.

**Zainab Ilyas**, MPhil Scholar at Department of Psychology, Institute of Southern Punjab, Multan, Pakistan.

**Abstract-** The aim of conducting this study was to examine the moderating role of anxiety with the relationship between self-esteem, self-concept and academic achievement among adolescent. This study has employed quantitative research technique to conduct the study. The sample was consisted of 520 students from the public university; The Islamia University of Bahawalpur (IUB), Pakistan and the random sampling technique was used to collect the data. For data collection, three instruments were used; Rosenberg (1965) self-esteem scale consisted on 10 items, self-concept clarity scale developed by Campbell et al. (1996) included 12 items, and the Beck Anxiety Inventory developed by Beck et al. (1988) consisted on 21 items. The results of this study showed that there is a positive relationship between self-esteem, self-concept and anxiety among adolescents. The results also showed the impact of anxiety on relation between self-esteem and academic achievement. The results further indicated that there is a significant impact of anxiety on relation between self-concept and academic achievement and there is no significant difference in both male and female on anxiety. However, self-esteem is high in females as compared to males.

**Keywords:** anxiety, academic achievement, self-esteem, self-concept, adolescent

### I. INTRODUCTION

The ordinary response to stress is called anxiety. It is the sentiment of distress or apprehension about the next happenings of life (Hussain et al. 2021). Anxiety is associated with the various disorders. The first one is panic disorder which is experiencing the iterate attacks of panic during the unanticipated times. Individuals suffering from panic are awful of the upcoming panic incursions (Kierkegaard, 2013). Similarly, the second one is a phobia, it is the fear of specific activity, situation, and the object. However, there is an obsessive-compulsive disorder, which is the repetition of the illogical thoughts that leads individuals to act in a certain way at different times. There is another form of anxiety which is separation anxiety disorder that is getting afraid of the loss of intimate relationships and the loved ones (Craske et al. 2011).

Academic ability is linked with the application of knowledge and skills that have learned and the students who know this application have high academic achievement (Nawaz et al. 2021). Academic performance and achievement are the most important topic that is being studied in most of the educational literature (Dishon-Berkovits, 2014). However, anxiety is the most important forecaster of academic success and studies which shows that it is the main cause of poor learning experiences.

Self-esteem is an individual's sense of his or her value or worth, or the extent to which a person values, approves of, appreciates, prizes, or likes himself or herself. It is generally considered to be the evaluative component of the self-concept, a broader representation of the self that included cognitive and behavioral aspects as well as evaluative or affective ones (Harris & Orth, 2020). Related concepts such as self-confidence implied a narrower sense of self-esteem. The relationship between self-esteem and psychological well-being in terms of depression, social anxiety, loneliness and alienation is well-established. It is believed that self-esteem worked like a trait and is stable across time within individuals (Li et al. 2018). Everyone's self-esteem is influenced by many factors such as parents, teachers, co-workers, friends, fellow

classmates and the environment are being constantly influencing self-esteem. It has been related to virtually every other psychological concept or domain, including personality, task performance and similar behavior, cognitive (e.g., attribution bias) and clinical concepts such as anxiety and depression (Cvencek et al. 2018).

Rosenberg (1965) described self-esteem as a favorable or unfavorable attitude towards the self (Zakeri & Karimpour, 2011). Dale (2019) stated that self-esteem is the product of two internal assessments or judgments, the global judgment and one's self-worth. The key to self-esteem was the amount of discrepancy between what a person desired and what that person believed he/she had achieved and the overall sense of support that the person he/she felt from people around him/her. Maslow (1954) first hypothesized that esteem was one of the five sets of human needs. Self-respect, autonomy and achievement were seen as internal esteem factors, while status, recognition and attention were deemed to be external esteem factors. Esteem was classified as a higher-order need because it concerned with the self of the individual while esteem was others perception of the individual while self-esteem was an opinion by the individual of himself (Omolayo, 2009).

Past research has shown that self-esteem and academic achievement correlated directly to a moderate degree (Afari, Ward, & Khine, 2012; Asakereh & Yousofi, 2018; Booth & Gerard, 2011; Jenaabadi, 2014; Rahmani, 2011; Troncone, Drammis, & Labella, 2014; Vialle, Heaven, & Ciarrochi, 2015). Having one's academic achievement meet one's academic expectations and desires was a major support to most college student's self-esteem. A high self-esteem had many positive effects and benefits, especially among college students (Hawi & Samaha, 2017). Students who felt positive about themselves had fewer sleepless nights, succumbed less easily to pressures of conformity by peers, were less likely to use drugs and alcohol, were more persistent at difficult tasks, were happier and more sociable and tended to perform better, academically.

On the other hand, college students with a low self-esteem tended to be unhappy and less sociable, were more likely to use drugs and alcohol and were more vulnerable to depression, which were all correlated with lower academic achievement (Moradi Sheykhjan, Jabari, & Rajeswari, 2014). Honors students demonstrated higher academic self-esteem and competency. For them, this academic self-esteem was a motivational factor. For many college students, their self-esteem was based or enforced by their academic success or achievements. Academic achievement was influenced by perceived competence, locus of control, autonomy and motivation (Farhan & Khan, 2015).

Baumeister et al. (2003) concluded from a review of the self-esteem literature that the benefits of high self-esteem fell into the categories of enhanced initiative and pleasant feelings. Bernard et al. (1996) found high correlations among self-esteem, self-efficacy, ego strength, hardiness, optimism and maladjustment and all of these constructs were significantly related to health. Stamatakis et al. (2004) looked at the association of self-esteem and mortality in a large sample of males in Finland. They reported that lower self-esteem was found to be associated with many socioeconomic, behavioral, psychosocial and disease characteristics.

In a study conducted by Dishman et al. (2006), 1250 girls were assessed and there was a strong positive relation between global physical self-concept and self-esteem and a moderate inverse relation between self-esteem and depression symptoms. Trautwein et al. (2006) demonstrated that reciprocal effects were found between self-esteem, academic self-concept and academic achievement. Additionally, the study of Knapen et al. (2005) showed the relationship between improvements in physical self-concept and enhancements in global self-esteem, depression and anxiety supports the potential role of the physical self-concept in the recovery process of depressed and anxious psychiatric inpatients. Heyman (1990) hypothesized that self-perception of one's learning disability would be related positively to both academic self-concept and self-esteem.

Using an Egyptian sample, Mattar (1981) found that the relationship between anxiety and academic achievement was positive and statistically significant for scientific section students, whereas it was negative for literary section students (El-Anzi, 2005). Further, Soliman (1979) studied the acceptance of superior and retarded sons of their parents' attitudes toward their academic achievement and its relationship to their anxiety level among 405 secondary school students in Cairo, Egypt and found a statistically significant correlation between anxiety and academic achievement in males, however, the correlation was not significant for the females.

Other clinical studies have shown that probably one major cause of anxiety is undergoing failure impression or lacking fitness in a person's characteristics and wishes (Sowislo & Orth, 2013). In fact, if one accepts that anxiety is a result of feeling being threatened or sensing hazard, it can be said that is in this territory which self-concept has been threatened. Also, several experimental and field researches have studied these parameters and confirmed clinical concepts (Dale et al. 2019). The results of the research conducted by Marsh & Martin (2011) shown an invert correlation between anxiety and self-concept, indeed high anxiety is relevant with low self-concept and high self-concept is in relation with affirmative attitude toward school.

These results of the study conducted by Srivastava and Joshi (2014) indicated that self-concept and self-esteem have a momentous role on mental health so that with a decline in these factors, symptoms and traits of anxiety, depression, loneliness, shyness and being reserved will be revealed if persistent and serious problems will ensue. On the other hand, a close a significant negative association exists between self-esteem and depression (Obeid et al. 2019). Further, Fawaz and Samaha (2021) stated that there's correlation between depression symptoms and academic and social failure; and these ineptitudes has increased the depression symptoms. Besides accomplished students with better scores have less anxiety in comparison with unsuccessful and deficient students. There is a significant affirmative correlation between self-esteem and high scores, while depression is associated with serious negative and critical self-evaluation (Ghosh, 2013). However, people who have a low estimating rate of their self-concept are likely to show certain personality characteristics such as shyness, reserved state, seclusion and loneliness.

## II. MATERIAL AND METHODS

Quantitative research technique was used to conduct this study and the questionnaire was distributed among the respondents.

### **Sample**

The sample was consisted on 520 adolescents and the sample were taken from the students of the public university; The Islamia University of Bahawalpur (IUB), Bahawalpur, Pakistan. Random sampling technique was used to collect the data. Demographic variable sheet (gender, age, education, CGP, institution) is also attach with inform consent. Statistical package for the social sciences (SPSS) was used to analyze the data and the Pearson correlation was used to find out the relationship among variables. Linear Regression analysis and T-test analysis was used to indicate the significant difference in variables.

### **Instruments**

#### **1. Self-esteem scale**

This scale was developed by Rosenberg (1965). It is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. The scale is believed to be uni-dimensional. All items are answered using a 4-point Likert scale format ranging from "Strongly Agree to Strongly Disagree". Items 2, 5, 6, 8, 9 are reverse scored. Give "Strongly Disagree" 2 points, "Agree" 3 points and "Strongly Agree" 4 points. Sum scores for all ten items. Keep scores on a continuous scale. Higher scores indicate higher self-esteem.

#### **2. Self-concept clarity scale**

This scale was developed by Campbell et al. (1996). Ones believes about himself are clearly defined, stable and internally coherent and it is characterized as the degree to which the clarity of self-concept aimed by this scale. It is a 5-point Likert scale ranges from 1 to 5 as Strongly Disagree (1), Disagree (2), Neither Agree nor Disagree (3), Agree (4) and Strongly Agree (5). The Cronbach's alpha of this scale is .86.

#### **3. Anxiety inventory**

This scale was developed by Beck et al. (1988) that is used to measure the severity of an anxiety in adults and adolescents. It is a 21-item multiple choice self-report inventory. It can discriminate anxiety from depression because the items in the Beck Anxiety Inventory (BAI) describe the emotional, physiological and cognitive symptoms of anxiety but not depression. It is a 4-point scale ranging from 0 (Not at All) to 3 (Severely, can barely stand it). Items are summed to obtain total scores ranging from 0 to 63 (Beck & Steer, 1993). Score of 0-21 = Low Anxiety, score of 22-35 = Moderate Anxiety, and the score of 36 and above = Potentially Concerning Levels of Anxiety.

### III. RESULTS, FINDINGS, AND DISCUSSION

**Table 1: Frequency and Percentage of Demographic Variables**

Variables		Frequency	%	Valid %	Cumulative %
Anxiety Levels	Minimal	126	24.2	24.2	24.2
	Mild	140	26.9	26.9	51.2
	Moderate	148	28.5	28.5	79.6
	Severe	106	20.4	20.4	100.0
CGPA	2.00-2.50	24	4.6	4.6	4.6
	2.51-3.00	131	25.2	25.2	29.8
	3.01-3.50	234	45.0	45.0	74.8
Gender	3.51-4.00	131	25.2	25.2	100.0
	Male	225	43.3	43.3	43.3
	Female	295	56.7	56.7	100.0
Age	18-20	174	33.5	33.5	33.5
	21-23	253	48.7	48.7	82.1
	24-26	93	17.9	17.9	100.0
Education	BS	334	64.2	64.2	64.2
	MSC	186	35.8	35.8	100.0
Institute	ISP	220	27.1	27.1	27.1
	BZU	300	72.9	72.9	100.0

Basically, self-concept and self-esteem are relevant and if self-esteem increase, it will amplify self-concept. Thus, both relate with each other and equally impact on academic achievement. Above table 1 shows the descriptive analysis of participants on demographic variables. The frequency of gender described that there were 225 male and 295 female students surveyed for this research and 174 students were in the age of 18-20 years, 253 in 21-23 years and 93 in 24-26 years. The frequency of the level of anxiety also shows that 126 of the participants were in the minimal anxiety level, 140 in mild, 148 in moderate, and 106 of the participants were in the severe of anxiety level. According to the result of education, 334 students of BS and 186 students of MSc participated in this research and 220 students surveyed from the ISP Multan while 300 students from BZU Multan.

**Table 2: Correlation between Self-Esteem, Self-Concept and Anxiety among Adolescents**

Variables	Anxiety	Self-esteem	Self-concept
Anxiety	1	.168**	.434**
Self-esteem		1	.094*
Self-concept			1

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

The results of the above table 2 shows that first hypothesis supported the relationship between self-concept and self-esteem. Both are relevant and supported to each other, if self-esteem increase then self-concept also increases. The result shows that second hypothesis stated correlation coefficient between self-esteem, self-concept and anxiety and it shows the positive relationship between self-esteem, self-concept and anxiety among adolescents. Result further shows that self-esteem and self-concept both are correlated and have positive impact on academic achievement.

**Table 3: Regression Analysis on Self-esteem and Academic Achievement**

Model	B	S.E.	Beta	f	P
Constant	19.02	.381			.000
Self-esteem	-.07	.019	-.168	15.007	.000
Constant	2.85	.067			.000
Academic Achievement	.003	.003	.044	1.005	.317

**Note:**  $R^2 = .188$ , Adjusted  $R^2 = .187$ ,  $f(1.005)$ ,  $df = 2$ ,  $P < 0.05$

In above Table 3, the third hypothesis of this study indicates that there is a significant impact of anxiety on the relation between self-esteem and academic achievement. Results also shows the point through linear regression analysis which define that there is a significant impact of anxiety on academic achievement.

**Table 4: Mean, Standard Deviation, t and P Value**

Variables	Gender	N	Mean	Std. Dev.	t	P
Anxiety	Male	225	16.02	10.65	.86	.388
	Female	295	16.83	10.40		
Self-esteem	Male	225	17.34	4.044	1.85	.065
	Female	295	18.11	5.166		
Self-concept	Male	225	28.04	9.923	1.90	.057
	Female	295	29.74	10.21		

$df = 518$ ,  $P < 0.05$

The results of the above table 4 reveals that male and female has no significant difference on anxiety and male and female both have equal anxiety of academic achievement. It also indicates that there is a significant difference between male and female on self-esteem and self-esteem has high anxiety in female as compare to male. The result also shows that there is also no significant difference among male and female on self-concept. However, increase or decrease of academic achievement had equally impact on male and female anxiety. Increase or decrease of self-concept and self-esteem has different impact on both genders equally.

#### IV. CONCLUSION

Self-esteem is basically a confidence about one's own self while the self-concept is the idea about one's own self. Anxiety is the fear, a feeling of worriedness, nervousness or uneasiness about something. However, academic achievement has a great impact on these three variables. The main purpose of this research was to investigate the relationship between self-esteem, self-concept, anxiety and academic achievement among adolescents. Basically, self-esteem and self-concept are relevant and if self-esteem increase, it will amplify self-concept. Thus, both relate with each other and equally impact on academic achievement. Self-concept, self-esteem and anxiety has significant impact on academic achievement and the increase of academic achievement is the increase of self-esteem and self-concept but increase of academic achievement is the decrease of anxiety. Further, there is no significant difference of anxiety among males and females but there is a significant difference of self-concept and self-esteem among males and females, and the females has more self-esteem and self-concept than males.

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