

# Personality Traits, General Self Efficacy, and Academic Performance among Madrassah Students

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## ABSTRACT

**Aim of the Study:** This study investigated the relationship between Personality Traits, Self-Efficacy and Academic Performances among Madrassah Students.

**Methodology:** A Cross-Sectional Survey Research Design was used to gather the data. Madrassah Students were the targeted population for the study. Participants were recruited through a non-random convenient sampling technique. Nonrandom Convenient sampling technique was used to collect data.

**Findings:** The findings of this study showed that the relationship between Big Five Inventory and General Self-Efficacy was statistically significant. There is a substantial relationship between General Self-Efficacy and Academic Performance. Results showed that there was no gender-specific statistically difference between the Big Five Inventory and General Self-Efficacy.

**Conclusion:** It was concluded that there is a significant positive relationship between personality traits, general self-efficacy, and academic performance. Personality traits significantly predict general self-efficacy and general self-efficacy significantly predicts academic performance with no gender differences.

**Keywords:** Personality Traits, General Self-Efficacy, Academic Performance, Madrassah Students.

## Introduction and Literature Review

A personality trait is a distinctive pattern of emotions, thoughts, and behaviors that tends to be true over time and in appropriate circumstances (Allport 1961). Many factors describe personality traits such as Extraversion, Agreeableness, Conscientiousness, Negative Emotionality, and Openness to Experience. Research has connected high Extraversion to societal standing and leadership abilities, Agreeableness to generosity, and satisfaction in relationships, Conscientiousness to career success and health, Negative Emotionality to psychological disorders and conflicts in relationships, Open-Mindedness to Spiritualism and liberalism in politics (Mammadov 2022). Personality Traits are directly related to Self-Efficacy. Self-efficacy is the belief that one can organize and carry out actions to accomplish a particular goal. It is thought that a person's perceived self-efficacy affects the tasks they choose to accomplish, how well they

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perform those tasks, how much effort they put into those efforts, and how consistently they complete them. Overall, the academic success of college students seems to be strongly predicted by self-efficacy. Both self-efficacy beliefs and personality characteristics are essential for explaining academic success. (Ommering, van Blankenstein et al. 2021) "The elements of individual variation in tendencies to show continuous patterns of mental and emotional states and behaviors" are reflected in personality traits. Unlike personality qualities, self-efficacy beliefs are associated with an individual's "belief in their capacity to plan and carry out a specific plan of action to resolve an issue or complete a task." (Zakiei, Vafapoor et al. 2020).

Self-efficacy consistently showed a positive relationship with academic performance across various models. Conscientiousness and emotional stability were significant predictors of self-efficacy and performance in certain analyses, while the influence of the other three traits appeared more transient (Stajkovic, Bandura et al. 2018). General self-efficacy (GSE) mediated all five personality-stress models, with extroversion and conscientiousness showing the strongest mediating effects. Neuroticism was most strongly associated with stress. GSE influences how personality traits affect and are interpreted concerning perceived stress. These findings suggest that GSE plays a crucial role in the relationship between personality and perceived stress (Ebstrup, Eplov et al. 2011). The study identified the connections between personality traits, self-efficacy, and academic performance among medical students. The findings revealed that individual differences in personality traits, both directly and indirectly through self-efficacy, significantly influence students' academic performance (Hayat, Kohoulat et al. 2020).

### ***Study Objective***

This study explored the relationship between personality traits, general self-efficacy, and academic performance among madrassah students, examining personality traits as predictors of self-efficacy and performance, and investigating gender differences.

### **Materials and Methods**

#### ***Ethical Approval***

The Departmental Research Review Committee for Ethics at International Institute of Science, Arts, and Technology (IISAT) approved the study, and all participants gave written informed consent after being informed of its purpose.

#### ***Tool***

Three instruments/tools are used in this particular research: (1) Big Five Inventory Scale (BFI), (2) General Self-Efficacy (GSE), (3) Academic Performance Scale (APS). John, Donahue, and Kentle created the 44-item Big Five Inventory (BFI) in 1991 as a quick and easy way to evaluate five different aspects of personality without having to examine each one in-depth. (Rammstedt and John 2007). To increase response consistency, detailed or context-related data was used in place of simple descriptions when selecting items, which were based on expert assessments and component analyses. A 5-point scale is used for each item, and scores are obtained by averaging the responses. The BFI maintains clarity and conciseness while guaranteeing strong content coverage and psychometric qualities. Jerusalem and Schwarzer (1992) developed the General Self-Efficacy Scale to measure perceived self-efficacy in handling stress and adjusting to life's challenges. With replies on a 4-point scale, the 10-item test which is intended for adults and adolescents takes around 4 minutes to complete. In the absence of recoding, the final score falls between 10 and 40. It displays a positive sense of self-worth that supports goal-setting, dedication, and bounce-backing after setbacks. The unidimensional scale has negative correlations with stress and depression and positive correlations with emotions and work satisfaction, with Cronbach's alphas ranging from .76 to .90 across 23 countries. (Sun and Rogers 2021). The Academic Performance Scale (APS), which rates students' performance and academic habits on a 5-point rating scale, has 8 items. Scores on the APS range from 0 to 40. Better performance is denoted by higher scores, which can be classified as failing, excellent, good, mediocre, or poor. The APS was created by Saginaw Valley State

University academics, and it has good test-retest reliability (.85) and internal consistency (.89). The scoring varies from 0–8 for failing to 33–40 for outstanding. The APS is a valid and consistent instrument for assessing students' academic performance. (Mavi, Chan et al. 2022)

### ***Research Design***

A Cross-Sectional Survey Research Design was used to gather the data (Weyant, 2022).

### ***Population and Sample***

Cross-Sectional Survey Research Design was used. Madrassah Students were the targeted population for the study. Participants were recruited through a non-random convenient sampling technique. A sample of 150 participants was selected via a convenient sampling technique. The Madrassah was located near Pindi Bypass, Gujranwala. The participants include 50 males and 100 females. The participants were included in the age range of 18-27 years having an education level of Bachelors and Masters.

### ***Data Analysis***

Statistical methods for the analysis of data including Pearson Product Moment Correlation (Hasan, Khan et al. 2020) were used to find the relationship between personality traits and general self-efficacy. Also, Independent sample t-tests were used to find gender differences in personality traits and general self-efficacy.

### ***Results***

Demographic Analysis, Correlational Analysis, Regression Analysis, and T-test for Gender are included.

Descriptive statistical analysis to find out the frequency and Percentage of demographic variables.

Table 1: *Frequency and Percentage of the Demographics (n=150)*

<b>Sr. No</b>	<b>Variable</b>	<b>Segregation</b>	<b>Frequency</b>	<b>Percentage%</b>
<b>1</b>	<b>Age</b>	18-22years	114	76.0%
		23-28years	36	24.0%
<b>2</b>	<b>Gender</b>	Boys	50	33.3%
		Girls	100	66.7%
<b>3</b>	<b>Family-system</b>	Nuclear	96	64.0%
		Joint	54	36.0%
<b>4</b>	<b>Res-Area</b>	Urban	98	65.3%
		Rural	52	34.7%

Table 1 shows the data of 150 Madrassah students of graduation and masters. The Table reveals information about the age, gender, family systems, and residential area. The majority (76.0%) of the participants belonged to the age of 18-22 years (24.0%) were from the age group 23-27 years, and the percentage of boys students (33.3%) and the percentage of girls students were (66.7%). Most of the students (64.0%) belonged to nuclear family and rest of (36.0%) students were from joint family system. Most of the students (65.3%) belonged to urban area and rest of (34.7%) students were from rural areas took an equal part in research.

Table 2: *Correlation*

Sr.No	Variable	1	2	3	4	5	6	7	8
1	Ext_T	-	.457**	.402**	.300**	.543**	.731**	.431**	.199*
2	Arg_T	-	-	.383**	.396**	.376**	.751**	.244**	.077
3	Con_T	-	-	-	.481**	.367**	.762**	.354**	.112
4	Neu_T	-	-	-	-	.376**	.719**	.226**	-.023
5	Ope_T	-	-	-	-	-	.622**	.329**	.257**
6	BFI	-	-	-	-	-	-	.429**	.141
7	GSE	-	-	-	-	-	-	-	.267**
8	APS	-	-	-	-	-	-	-	-
	M	26.4967	27.2207	26.9178	23.6508	36.9667	111.6794	28.7180	27.7108
	SD	4.15238	4.49463	4.56377	4.10093	6.66697	13.66646	4.70438	5.10077

**Note:** \* = .05, \*\* = .01, Ext=Extraversion, Arg=Agreeableness, Con=Conscientiousness, Neu=Neuroticism, Ope=Openness, BFI = Big Five Inventory, GSE =General Self Efficacy, APS = Academic Performance Scale, M= Mean, SD= Standard deviation.

According to Table 2, there is a significant relationship between Big Five Inventory and General Self-Efficacy because of the correlation ( $r = .429$ ,  $p < .01$ ). According to Table 2, there is a non-significant relationship between Big Five Inventory and Academic Performance Scale because the correlation ( $r = .141$ ,  $p < .05$ ). According to table 2, there is a significant relationship between General Self-Efficacy and Academic Performance Scale because the correlation ( $r = .267$ ,  $p < .01$ ).

Table 3: *Linear Regression Analysis for Big Five Inventory as a predictor of General Self Efficacy among Madrassah Students*

Variable	B	$\Delta R^2$	F
Model (BFI_T) ( $R^2 = .184$ )	.429***	.179***	33.433

**Note.** BFI = Big Five Inventory

\*\*\* $p < .001$

Table depicts the linear regression for Big Five Inventory significantly predicting (F =33.433,  $p < .001$ ) General Self Efficacy ( $\Delta R^2 = .179$ ) among Madrassah Students.

Table 4: *Table depicts the linear regression for General Self Efficacy significantly predicting.*

Variable	B	$\Delta R^2$	F
Model (GSE_T) ( $R^2 = .071$ )	.267***	.065***	11.375

**Note.** GSE = General Self Efficacy

\*\*\* $p < .001$

Table depicts the linear regression for General Self Efficacy significantly predicting (F =11.375,  $p < .001$ ) Academic Performance Scale ( $\Delta R^2 = .071$ ) among Madrassah Students.

Table 5: Mean, Standard Deviation and t-test analysis for difference in personality trait and general self-efficacy and academic performance scale according to gender.

Variable	Male (n=50)	Female (n=100)	95%CI				
	M (SD)	M (SD)	df	t	p	LL	UP
<b>Big Five Inventory</b>	109.5633 (18.28361)	112.7374 (10.59493)	65.915	-1.136	.260	-8.75324	2.40518
<b>General Self Efficacy</b>	28.8880 (5.99778)	28.6330 (3.93467)	70.736	.273	.786	-1.60952	2.11952
<b>Academic Performance scale</b>	27.4425 (5.47526)	27.8450 (4.92603)	148	-.454	.650	-2.15303	1.34803

**Table 5** shows results for the personality traits, general self-efficacy and Academic performance. For personality traits, the data was non- significant as the scores for the boys (M=109.5633, SD=18.28361) and girls (M=112.7374, SD=10.59493) conditions  $t = -1.136$ ,  $p = .260$  ( $p > .005$ ). Same for the general self-efficacy, the data was non- significant as the scores for boys (M =28.8880, SD =5.99778) and for girls (M =28.6330, SD=3.93467) condition  $t = .273$ ,  $p = .786$  ( $p > .005$ ). Same for the academic performance, the data was non- significant as the scores for the boys (M=27.4425, SD=5.47526) and girls (M=27.8450, SD=4.92603) conditions  $t = -.454$ ,  $p = .650$  ( $p > .005$ ). These findings indicate that there is no significant difference between personality traits and self efficacy and academic performance in boys and girls.

## Discussion

This study investigated the relationship between Big Five Inventory, General self-efficacy, and Academic Performance among Madrassah. The primary objective was to assess the relationship between general self-efficacy and academic performance (Khan 2023). The second objective was to determine the significance of each of the following factors gender, age, residential area, education level, family system, job, family earnings, and family system. The relationship between Big Five Inventory and General Self-Efficacy was statistically significant ( $r = .429$ ,  $p < .01$ ). Analysis indicates that there is no statistically significant relationship between Big Five Inventory and Academic Performance ( $r = .141$ ,  $p < .05$ ). Also there is a significant relationship between General Self-Efficacy and Academic Performance ( $r = .267$ ,  $p < .01$ ). Results of the analysis show that there is no gender-specific statistically significant difference between the Big Five Inventory and General Self-Efficacy. These results show that Big Five Inventory and General Self-Efficacy among madrassah students are unaffected by gender. The purpose of the study was to evaluate the connection between the Big Five personality traits and general self-efficacy (Abood, Alharbi et al. 2020). The data for the meta-analysis came from 53 studies with 60 independent samples, 188 effect sizes, and 28,704 participants. Lower neuroticism and higher extraversion, openness to experience, agreeableness, and conscientiousness were connected with higher general self-efficacy. Stress, low general self-efficacy (GSE), and introverted or unstable personalities are major predictors of burnout, according to a study that examined the relationship between personality traits, stress, and job-related burnout among nurses. Age, job title, and length of service were found to have an important association with burnout, according to the Maslach Burnout Inventory (MBI) (Yao et al., 2018). Linear regression for Big Five Inventory significantly predicted ( $F = 33.433$ ,  $p < .001$ ) General Self Efficacy ( $\Delta R^2 = .179$ ) among Madrassah Students. Also, the linear regression for General Self Efficacy significantly predicted ( $F = 11.375$ ,  $p < .001$ ) Academic Performance Scale ( $\Delta R^2 = .071$ ) among Madrassah Students. The findings of the T-test indicate that there is no significant difference between personality traits, self-efficacy, and academic performance in boys and girls.

## Conclusion

Results indicated that there is a significant positive relationship between personality traits, general self-efficacy, and academic performance. Analysis shows that personality traits significantly predict general self-efficacy and general self-efficacy is significantly predicting academic performance with no gender differences.

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## Conflict of Interest


Authors have no conflict of interest.


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