

## PERSONALITY AND ACADEMIC PERFORMANCE: A CORRELATIONAL ANALYSIS

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### ABSTRACT

Personality traits have been cited as key determinants of academic success for many years by educators who have been looking for the best ways to help students succeed in school. An important application of identifying the factors involved in academic achievement is making the teaching-learning process easier, so it is important to investigate the main variables that have been associated with achievement at the same time in order to provide information on their relative merit in the population studied. To the contrary, little study has been done on the influence of character characteristics and self-esteem on academic performance. Results in academics were strongly linked to personality factors and several aspects of self-esteem. Extraversion, agreeableness, conscientiousness, emotional stability, and openness to new experiences are among the five major personality qualities examined in this research. A sample of 706 MBA students from various management colleges in the Mumbai area is studied in preliminary research. A graduate's percentage of marks and an MBA student's percentage of marks from the first year of school were both used to gauge academic achievement. The data was analysed using the T-test and the Mann Whitney U test. Academic achievement was highly impacted by conscientiousness on both measures. Academic achievement was also influenced by the students' Extraversion and Agreeableness. Emotional stability and openness to experience were not shown to have an effect on academics in this study.

**KEYWORDS:** - Personality Traits, Academic Performance, MBA Students

### INTRODUCTION

One of the most important fields of research in education psychology is the study of the characteristics that lead to academic success, which has significant consequences for both learning and teaching. Understanding the elements that might impact educational achievement can help educators quickly identify students who are highly capable and those who may pose a difficulty, and it can also help educators establish effective techniques for improving their teaching skills. Predicting academic performance is especially important in the 34 nations of the OECD (Organization for Economic Cooperation and Development), where an average 6.2 percent of gross domestic product is spent on education, Poropat argues. There is a dynamic interplay between a hierarchy of criteria that determines the scholastic experience and the relative success. Cognitive capacity, gender, success motivation, family socio-economic status, parental engagement in school activities, and class composition all play a role in this. It's also worth noting that various theoretical models use different

measures of personality to describe the link between personality and academic achievement.

The purpose of this research was to see whether and to what degree personality and self-esteem are connected to and predictive of academic success when viewed as independent factors. Students' socioeconomic status (SES) was also taken into account, due to the well-documented impact of SES on academic attainment. The research also looked at whether the relationships between the predictors and the dependent variable differed by gender. The correlation between predictors and criteria will be examined, and school grades from three distinct periods of the academic year will be used as indicators to validate the stability of the predictors.

## LITERATURE REVIEW

**Salim Nauzeer (2021)** - Researchers studying how students do in school now rely heavily on MLP (motivation, learning, and personality characteristics). In spite of a large body of research on how these three aspects of performance interact, no thorough review of the empirical literature has yet been done on how these three factors work together to determine academic achievement. A constrained maximum likelihood estimator is used in a random-effects meta-regression study on 54 publications containing 344 estimations. The average impact size for the research was found to be  $r=0.22$ . Study heterogeneity is strongly suggested by the forest plot. Publication bias is shown to be nonexistent. Observed effects on students' grades demonstrate the importance of MLP, both in relation to other factors and to an individual. A number of other characteristics have been discovered to be crucial in determining academic achievement. These include income level; year; the major technique utilised; cohort gender; sample size; publication type; and citations. Developing an integrated method to looking at educational goals and investigating the correlations of combined MLP and academic achievement will need further future effort.

**Shiksha Upadhyaya (2021)** - It was shown that HEXACO personality characteristics might be used to predict academic success when combined with data on demographics and other sociodemographic factors. Additionally, this research looked at the disparities between genders in terms of personality characteristics and academic success. A total of 377 high school pupils were included in the study's sample. Personality qualities of pupils were analysed using the HEXACO-PI test. Students' self-reported GPA was used to gauge their level of accomplishment in the classroom. Only the E characteristic was shown to have substantial gender differences. Gender did not appear to have a significant impact on academic success. According to the findings, a person's X and C personality qualities have a strong association with academic success. Furthermore, the combined impact of personality characteristics and demographic factors predicted 23.1% of the variance in academic attainment. Another significant independent predictor was extraversion and conscientiousness. As a result, pupils' academic performance might benefit by taking their personality features into account.

**Simon Calmar Andersen (2020)** - Students' high school and college grades are strongly correlated with their personalities, according to several research. When it comes to how personality characteristics and academic success are linked, there is a lot less data than there used to be, and current research reveal a wide range of results. It is hypothesised in this study that the relationship between academic performance and traits like agreeableness, emotional stability, and conscientiousness changes over the course of school, but it is also tested against the hypothesis that previous studies' findings of shifting relationships are mostly due to measurement artefacts. A total of 135,389 fourth- through eighth-grade children from around the country were utilised in this study. A second sample of 127,375 pupils was used to verify our findings. Both academic performance and Conscientiousness were shown to be significantly linked at all grade levels, and the importance of Agreeableness and Emotional Stability was mostly due to their links with Conscientiousness. There was a correlation between Emotional Stability and performance regardless of age. When it comes to education, these data show that personality characteristics and academic achievement have a strong correlation, which might have a significant impact on the education of children in elementary school.

**Shajratul Dur (2018)** - Extraversion, agreeableness, conscientiousness, emotional stability, and openness to new experiences are among the five major personality qualities examined in this research. A sample of 706 MBA students from various management colleges in the Mumbai area is studied in preliminary research. A graduate's percentage of marks and an MBA student's percentage of marks from the first year of school were both used to gauge academic achievement. The data was analysed using the T-test and the Mann Whitney U test. Academic achievement was highly impacted by conscientiousness on both measures. Academic achievement was also influenced by the students' Extraversion and Agreeableness. Emotional stability and openness to experience were not shown to have an effect on academics in this study.

**Asghar Hazrati-Viari (2012)** - Psychological factors were explored in relation to academic motivation and performance in this research. Study subjects were college students who gave their time and consent to participate. Two questionnaires (NEO-FFI, Academic Motivation) were given to them as part of their orientation process (AMS-C 28, included GPA and demographic data). Extrinsic motivation was shown to be more strongly correlated with conscientiousness than was intrinsic motivation. Academic motivation mediated the link between openness to experience and conscientiousness with academic achievement, as predicted,

## RESEARCH AND METHODOLOGY

Literature reviews are used for secondary research. Survey questionnaires are used to perform primary research on postgraduate students in management courses. Descriptive and exploratory research are the two main types of research. This study is aimed at Mumbai-based post-graduate students of business management. A total of 706 students were included in the study. According to Uma Sekaran's book "Research methodologies for business" (2015), sample size was taken into account by utilising public population figures and the associated sample size. Populations of a size greater

than 10,000 are regarded statistically infinite, hence a sample size of 706 is deemed enough when the sample percentage is 4 percent.

Purposive sampling is a sampling technique. Seven Mumbai-based institutions have been chosen for consideration. A questionnaire is sent to every MBA student at these seven schools. 478 (approximately 68 percent) of 706 management students were males and 228 (about 32 percent) were women. MBA programmes tend to be male-dominated institutions. Only management students from seven different Mumbai-area institutions were asked to complete the survey.

Personality characteristics are assessed using Goldberg, L.R. (1992)'s big five factor framework. Close-ended questions centred on each of the major five personality characteristics, namely emotional stability, extroversion, openness to new experiences, agreeableness, and conscientiousness, are used to assess each personality domain. Percentage of grades achieved in graduation and the first year of an MBA are requested. Items evaluating personality qualities have a Cronbach's alpha of 0.929, which indicates that the questionnaire is trustworthy.

Descriptive and inferential analysis were used to examine the acquired data. Statistical Package for Service Solutions (SPSS) is used to examine the data (SPSS). Personality characteristics and academic achievement are analysed using descriptive statistics. Whitney Mann Personality characteristics were examined in terms of their influence on academic performance using a U test and a t-test.

## DATA ANALYSIS

Descriptive and inferential analyses of the data are both included in this process. In order to determine the normality of data, skewness, and kurtosis, descriptive analysis was used. Hypotheses are tested using inferential analysis in order to determine the link between a person's personality and their academic achievement. The findings of these investigations are outlined below. Preliminary understanding of personality characteristics emerged as an essential part of descriptive data processing.

**Table 1: Personality Traits**

	Extroversion	Agreeableness	Conscientiousness	Emotional Stability	Openness To Experiences
N	706	706	706	706	706
Mean	3.693	3.788	3.688	3.312	3.591
Median	4.000	4.000	4.000	3.000	4.000
Mode	4.0	4.0	4.0	3.0	4.0
Skewness	-.376	-.825	-.566	-.228	-.566

Std. Error of Skewness	.092	.092	.092	.092	.092
Kurtosis	.298	1.107	.535	-.097	.827
Std. Error of Kurtosis	.184	.184	.184	.184	.184

All 706 students' average rankings are shown in Table 1. Students scored well (above 3 out of a possible 5 on a scale of 1 to 5) on all five of the personality characteristics tested. The middle and average number is 4. When it comes to emotional stability, the average is at its lowest point. Personality qualities were scored more highly by students on average. Understanding the central tendency of the dependent variables is the next stage in this process. Parametric and non-parametric tests are used to determine the data's normality.

**Table 2: Academic Performance**

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	Std. Error	Kurtosis	Std. Error
Graduation %	666	47.06	49.94	97.00	68.7476	8.72770	76.173	.520	.095	.116	.189
MBA First Year %	422	47.00	42.00	89.00	68.8816	6.83951	46.779	-.049	.119	.250	.237

As seen in Table 2, dependent variables academics have descriptive statistics (Percentage of marks). 666 of the 706 students who took the survey indicated that they had graduated. The proportion varied from 49.94% to 97%, with a mean of 68.74% as the midpoint. A first-year MBA graduation rate of 422 students was

revealed. From 47% to 89%, with a mean of 68%, the percentages were all over the place.

**Table 3: Normality Test**

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Graduation	.064	663	.000	.979	663	.000
Percentage						
MBA First	.053	183	.200	.992	183	.365
Year						
Percentage						

a. Lilliefors Significance Correction

A 0.05 significance level for graduation percentage indicates that data are not normally distributed at this level of significance, as seen in Table 3. The hypothesis will be tested using a non-parametric test (the Mann Whitney U test).

MBA first-year percentages, on the other hand, are normally distributed at a 5% significance level ( $p > 0.05$ ). The hypothesis will be tested using a parametric test (t-test) based on MBA first-year Percentage. Based on Graduation Percentage, the following hypothesis examines the influence of personality factors on academic success.

**H<sub>1</sub>:** Personality traits (Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to Experiences) impact academic performance (considering Percentage of marks secured in Graduation).

**Table 4: Relationship between Personality Traits and Academics (Graduation %)**

Mann-Whitney (U)	Graduation percentage		
	U	p	N
<b>Extraversion</b>	46291.500	.023	666
<b>Agreeableness</b>	43052.000	.025	666
<b>Conscientiousness</b>	44990.000	.001	666
<b>Emotional Stability</b>	52839.000	.882	666
<b>Openness to Experiences</b>	51413.500	.133	666

5% significance level allows for partial acceptance of Hypothesis H1. Conscientiousness ( $U=45288.000$ ,  $p=0.002$ ) may be concluded from the Table IV data of Mann-Whitney statistics analysing the association between personality qualities and academics. In addition, the percentage of marks earned in graduation is significantly influenced by agreeableness ( $U=43052$ ,  $p=0.025$ ) and extraversion ( $U=46291.500$ ,  $p=0.023$ ).

Students in business management having higher levels of conscientiousness, extraversion, and agreeableness do better academically, as seen by the higher percentage of their final grade in which they scored. Next, the influence of personality factors on academic achievement is evaluated using the proportion of MBA first-year students in the study.

H<sub>2</sub>: Personality traits (Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to Experiences) impact academic performance (considering Percentage of marks secured in MBA first year).

**Table 5: Relationship between Personality Traits and Academics (MBA First Year %)**

t test	MBA first year percentage		
	T	p	df
<b>Extraversion</b>	0.923	0.357	422
<b>Agreeableness</b>	0.640	0.523	422
<b>Conscientiousness</b>	3.963	0.000	422
<b>Emotional Stability</b>	-0.599	0.550	422
<b>Openness to Experiences</b>	-0.278	0.781	422

At a 5% level of significance, hypothesis H<sub>2</sub> is somewhat accepted. Table 5's t-test statistics show that conscientiousness has a significant influence on academic achievement ( $t=3.963$ ,  $p=0.00001$ ) based on the results. However, there is no other feature that has a substantial influence on academics when it comes to MBA first-year scores. According to the percentage of marks they earned in their first year of MBA, business management students with a high level of conscientiousness seem to do better academically.

## CONCLUSION

The present review indicates the prominent role of personality traits with respect to academic performance that gives answer to the question why some individuals are academically inclined and others are not in spite having same intelligence level. It shows that the optimistic view of early researchers was correct that personality has its relation with academic performance; it is not a mere assistant of intelligence in determining the academic performance. The w (will factor) means the willingness of an individual to perform is equally important in determining academic achievement and it is as important as g (general factor) of intelligence. The most related personality

trait Conscientiousness is the key factor in predicting the performance of an individual. The research conducted so far statistically support the correlation and yet there are many key factors to be explored for establishing for direct relationship. Based on data analysis and hypothesis testing, it can be concluded that only Conscientiousness strongly positively influence academic percentage. Agreeableness and extraversion also influenced academic percentage, but not for all measures of academic success. The primary research and hypothesis testing hence proves the strong influence of personality traits specially Conscientiousness on academic performance of business management students.

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