

PERSONALITY TRAITS AS PREDICTORS OF ACADEMIC ACHIEVEMENT OF PUBLIC SECONDARY SCHOOL STUDENTS IN BENIN METROPOLIS

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Abstract

The study examines the Personality Traits as Predictors of Academic Achievement of Public Secondary School Students in Benin Metropolis. To guide the study, six research questions were raised and five hypotheses were formulated for the study. The descriptive survey research design was adopted. The sample for the study consisted of 200 senior secondary school 2 students. The simple random sampling technique was used to select the sample. The instrument for the study was a 20-item questionnaire constructed by the researcher: titled "Students Personality Assessment Questionnaire (SPAQ)" which was duly validated with a reliability index of 0.77 using cronbach alpha. Proforma was used to collect students scores The data obtained from the instrument was analysed using mean and standard deviation and Linear Regression Analysis. Finding revealed that that openness, conscientiousness and extraversion positively predict public secondary school students' achievement while agreeableness and neuroticism negatively predict public secondary school students' academic achievement in Benin Metropolis. Also, the findings revealed that the five big domains significantly predict male and female students' academic achievement in Benin Metropolis. From this result, it was therefore recommended that students who possesses openness, contentiousness, extraversion and neuroticism personality trait can achieve better academically. Again, those students possessing agreeableness personality trait, teacher may guide them towards attaining better academic achievements and school management should employ the services of experts to give seminars and workshop to both students and teachers on personality traits and their effects on students' academic achievement.

Keywords: Assessment, Personality measurement, Traits, Predictors and Public Secondary School

Introduction

Assessment is a major tool through which teachers can measure learners' knowledge after they have been exposed to course of instruction. It provides support to teachers to modify their instruction and learning activities of their students. Assessment provides information to other stakeholders in the educational field that makes decisions about educational policy related to students. Onuka and Akinyemi

(2012) opined that assessment is a means of determining the extent to which education has achieved its goals and objectives while Nkeki and Osarumwense (2021) sees it as an evaluation of learners' teaching and learning outcome so as to make judgment about their academic achievement as well as identifying their abilities and weaknesses in a certain subject.

Experts and researchers in various educational field have long focused on teaching and learning procedures to look into the needs of individual students. Learners differ in their level of personal trait and intelligence, they differently receive and process information, understanding individual differences in academic achievement is difficult to meet the aspiration of today's learners' challenges. Knowledge of the factors that influence academic achievement of students has certain implications for education and learning, in terms of tailoring teaching methods to individuals' learning styles and for curricula design Obilor and Sakpege (2022). Various researchers and psychologists such as Jerald Greenberg, Herbert J. Walberg and many others tried to unwind the complication bordering students' academic achievement. According to Prince (2018) states that these researchers and psychologists attentively showed concern to extraneous factors like school location, instructional resources, teaching techniques, types of school, study habits, teachers' certification and experiences, and so on.

In order to resolve the issue of poor academic achievement for students, a lot of parents spent huge fund to admit their children in standard educational institutions while other parents who have enough finance go a long way to send their children to get good quality education outside the country as they are convince that this will boost the academic achievement of their children. The happiness of parents is to see their children performing excellently and to make a good family name and reputation. This zeal for high academic achievement among learners in secondary schools place too much constraint on learners, teachers, evaluators, psychologists and the education system at large. Academic achievement is expressed by the dynamics of the pupil's relations with the system of school demands materialized in a congruent relation between demands and performances Obilor and Sakpege (2022). The school curriculum and the learning tasks formulated by the teachers are comparison elements, a kind of reference standard in relation to which one determines the levels of academic achievement (high, medium or low) according to the size of the correlation between the demands and the pupil's performances (Golu & Golu, 2003). Undoubtedly, high academic achievement is as a result of high intelligence quotient of learners. Therefore, this studies have showed that personality can be the best predictor of academic achievements.

Thus, personality refers to innate or inborn that is, personality comes from inside which determine learners' unique adjustment to their environment. Personality is also referring to as a set of traits found in an individual that influences and defines his or her cognition, motivation and behaviour. Larsen and Buss (2008) defined personality as psychological traits and mechanisms within an individual that

are organized and relatively enduring and that influence his or her interactions with, and adaptations to the environment. The learners become responsive to their environment. It displays certain degree of persistency of a collection of behaviours. Personality is determined by certain factors such as hereditary, environmental and many others. A blend of personality traits is vital for learners to perform successfully academically. Santrock, (2012) opined that researchers, educators and psychologists have been constantly searching for a set of variables that predicts pattern of students' behaviours and their relationship to academic achievement. Wilt (2002) has found personality traits to be significantly related to school performance. Learners are likely to prefer learning environments consistent with that of their type of personality. Therefore, it is important to note that for a learner to assemble the necessary knowledge to help him achieve high in his academic, his personality is very necessary to learning.

Furnham, Chamorro-Premuzic, and McDougall (2003) opined that there are other factors like personality traits, aside cognitive ability that account for the variation evident in learners' academic achievement.

The most broadly acclaimed personality traits are those in the Big Five Personality Model (Goldberg, 2000) involves Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism (OCEAN). Due to this broadly acclaimed theory and practice personality traits, educationists, evaluators and psychologist now used these tools in measuring these traits in order to understand student's OCEAN profile. The term "openness" refers to open-minded, insightful, imaginative and creative an individual can be. Open minded person tends to be more intellectually inquisitive and having a strong desire to have variety and are curious and perceptive to his or her environment. Some researchers such as Busato, Prins, Elshout, & Hamaker, 2000; Busato, 2000; Chamorro-Premuzic and Furnham, 2003 associated openness to greater achievement.

Openness to experience, therefore refers to artistic interests, emotionality, adventurousness, Intellect, liberalism and variety of experience. It shows the extent of intellectual curiosity, creativity and a desire for innovative and change which an individual possesses. Again, it is the degree to which an individual is insightful or resourceful or enterprising and portraying his personal preference for a change of activities, such as his or her school practice which has significant influence on his or her academic achievement. Conscientiousness is a personality trait that agrees with the most powerful, out of all personality traits, with overall academic performance (Barrick et al., 2001; Hurtz & Donovan, 2000). Steel (2007) found that conscientiousness has two characteristics which are sustained effort and goal-setting which contribute towards academic achievement. MacCann (2012) opined that conscientious learners tend to have high scores. Extraversion is another factor that employs extraordinarily powerful and broad influence on students' academic achievement. This is a wide trait and, like introversion, exists on an infiniteness of behaviour and attitudes. Extraverts are relatively outgoing, gregarious, sociable, and

openly expressive. It is characterized by sociability, spontaneity and adventurousness (Clark & Schroth 2010). Agreeableness is a personality trait that exhibit itself in a person attributes that are seen as sympathetic, cooperative, warm, and considerate. Any learner that relates with the laid down principle and is considerate in his or her academic excellence in the long run. The more agreeable a person is, the more likely he or she is to be trustworthy, friendly and warm-hearted. Disagreeable person is unfriendly, cold-hearted and suspicious of others, and he or she lacked cooperation.

Agreeableness enfold constructs of sympathy, cooperativeness, and helpfulness towards others. It is seen as the extent to which an individual is friendly, warm-hearted, amiable and co-operative as opposed to irritable, uncooperative, inflexible, unpleasant and disagreeable (Nofle & Robins, 2007). Poropat (2014) believed that high agreeableness facilitates learning and therefore enhances academic performance of students. De Raad and Schouwenberg (2000) argued that agreeableness has positive effect on academic performance because it encourages team work. Lastly, neuroticism is seen as “individual differences in one's nature towards constructing, perceiving and feeling realities in threatening, disturbing or problematic ways” (Hakimi et al., 2011). Due to its nature, neuroticism was negatively associated with academic achievement (Duff, Boyle, Dunleavy, & Ferguson, 2004). In line with the earlier studies, Furnham and Monsen (2009) opined that neuroticism and academic performance were negatively correlated due to the fact that the stress level that neurotic learners experienced was much higher than the facilitating level. It is interactive to note that neuroticism factor, to a broad extent, affects students both their physical and psychological traits. Psychologists now have the feeling that these traits are the best method of measuring personality and thus, give students insight into how they can react to academic situations, thus making it a vital and powerful predictor of either success or failure within an academic achievement.

Therefore, personality measurement involves the administration, scoring, and interpretation of empirically supported measures of personality traits and approach so as to structure psychological interventions and improve the precision of behavioural prediction in a variety of contexts and settings. It refers to the tools and techniques designed to measure the attribute patterns of traits that students display in their process of learning. There is multiplicity of approaches to personality measurement, and argument surrounding many facets of the broadly used approaches and techniques. There are four approaches and techniques used in measuring the personality of the individuals. These include subjective methods, objective methods, projective methods and psycho-analytic methods.

Subjective methods are methods or techniques in which the individuals are allowed to say what they know about themselves as an object of observation. They are based on what the subject themselves have to disclose about their traits, attitudes

and personal experiences. Some of the vital subjective methods used in personality measurement are; Autobiography which the individual narrate about his or herself, given either freely or according to certain subject headings provided by the examiner, of his experiences throughout life, of his present aims, purposes, interests and attitudes. The subject has freedom in selecting experiences which are of significance to him and these reveal his personality. The disadvantage is that what the individual reveal about his or herself is that part of his experience which he or she is willing to reveal. A case- study method is another subjective method of giving information about the individual's family background, his or her home background, his or her medical history, his or her educational career, his or her friendships, his or her marital life, his or her profession and many others. This method is more vital in understanding the personality-patterns of an individual who is maladjusted. Another subjective method is interview technique. The interview is the most frequent technique of determine personality. The interviewer questions permit the individual talk freely in order to acquire a clear understanding of the individual. From what the individual says about his or herself, help the interviewer knows about his or her interests, problems, benefits and constraints.

The interviewer measures personality traits not only from the content of answers to questions asked, but also from the assertiveness with which the information are revealed, by the interest manifested, by vocabulary references which the subject engaged accidentally in his or her discussion and by observing his or her delay, his or her anxious, his or her emotionality and the like. The constraint of the technique is that it is subjective and less valid than how an individual sees how it may look like. Again, questionnaire is another subjective method of measuring personality. Questionnaires are written questions which the individual is expected to respond to. Ordinarily, the individual is supposed to respond to each question in the questionnaire by ticking either 'true or 'false' 'yes or no', agree or disagree' provided in the questionnaire. The investigator counts the number of positive worded items and negatively worded items and therefore determine whether a particular person have certain traits or not. Some of the well- known personality questionnaires are the Bernreuter Personality Questionnaire, the Bell Adjustment Inventory and the Washburne Social-Adjustment inventory.

Objective methods do not depend on the subject's own statements about his or herself but on his or her overt behaviour as exhibited to others who serve as observers or judges. The individual, as far as possible, is examined in specific life situations where his or her specific traits, habits and other attributes are led into play and can therefore be directly examined by the examiner. Some of the objective methods are; Miniature life situations. In miniature life situations, artificial situations look like real life situations and the subject's reactions and behaviour are observed and assessed. Circumstances involving team-work, honesty, hardwork and cooperation can be created and the subject's behaviour may be stated and judged in accordingly.

Unobserved observation method is another objective method. This method is common in child development centres of guidance clinics. The individual is told to exhibit certain character or is left to exhibit certain task himself and then, his behaviour is observed through screen or other instrument and he is observed through a secret microphone setup. One modification of this technique is lengthened observation of an individual in the same situation for several days together. Or the individual is observed several persons and the observations are joint together. Again, before observation begins, certain decisions must be ensuing as to what to observe. One notable issue that need to be put in place in this method is the distinction between what is observed and what is interpreted. Rating scale is another objective method for personality measurement. Rating scales rate the individual of the possession or absence of particular traits on a specific scale. The individual is given a place on the scale or a score which shows the extent to which an individual has a given behavioural trait. The rating scales can be utilized only by those who have knowledge about the individuals rated and who have observed them in respect of the trait for which they are rating them.

Personality Inventories is also an objective method for measuring personality. In this technique, a person narrates his or her past behaviour, feelings and aspiration about his personality. This can be a good source of information, Self-ratings can be done through personality inventories and paper and pencil test. Some important personality inventories are: California Tests of Personality, Minnesota Multiphasic Personality Inventory (MMPI), Bell's Adjustment Inventory, Woodworth Personal Data Sheet, Edward Personal Preference Schedule, Cornell Index, Boyd's Personality Questionnaire, Guilford-Zimmerman Temperament Survey, Minnesota Counselling Inventory, Thurstone Temperament Schedule, Eysenck's Personality Inventory, The Shipley Personal Inventory, I.P.P. Personality Inventory Test, Comrey Personality Scales, Saxena's Personality Inventory, Mittal's Adjustment Inventory (Cronbach, 1970).

In projective techniques, the observer does not examine the overt behaviour of the individual just as that of miniature life situations in objective method; neither does the observer instruct the individual to name his view of his own behaviour or what he feels about particular experiences. Instead, the individual is asked to act in an imaginative way which is by formulating a story, interpreting ink-blots or constructing certain pattern out of a material and drafting his desires. Therefore, the individual is motivated to project his feelings, emotions, desires and others freely in specific situations which are provided. These techniques are, as a result, try to display the underlying traits, feelings, fears, attitudes and imaginative situation that examine the behaviour of a person in real sense. The projective method assumes that what a person thinks in his unstructured environment and what he feels about it, makes him to display his innermost attributes or his personality.

Some of the important projective methods are the Rosschach Ink Blot Test (RIBT). This test was propounded by a Swiss psychologist Herman Rosschach

(1921). It is made up of ten inkblots consisting of symmetrical cards. Five of these cards have black and white colours, two have touch of red colour and three have other colours. The test is often administered personally. When the examiner displays the card before the individual he is asked to say what he observe in the inkblot. In the second perspective known as the “enquiry”, the examiner examines fully not only what the individual observes, but again what and how he observes it. In the third perspective known as “testing the limits”, the examiner tries to examine if the individual responds to the colour, shading and other meaningful aspects of the inkblots, or if the whole or parts of the blots are utilized by the individual in his reactions. All these reactions are thus subjected to a scoring method, designed either by Beek or by Klopfer and Kelley. After which, the interpretation comes in. The scoring patterns of the test are movement and colour which are interpreted as signifying various functions of the personality intellectual creativity, outgoing emotionality, practical mindedness and the like. Again, the Thematic Apperception Test is another projective method in determining personality measurement. This method was propounded by Murray and Morgan (1935) made up of 20 pictures. The individual is instructed to narrate the story suggested to him by each person. These pictures are arranged in various groups for male and female adults and for children. On each picture, the individual narrates the story by identifying the characters, explaining their relationships to each other, explaining what preceded the situation display in the picture, and stating what comes out.

Children's Apperception Test (C.A.T.) is another projective method. This method was constructed Bellack in 1948. This technique is used to test the personality of children ranging from 3-10 of age. Little children enjoy listening to stories about animals especially tortoise and monkey and in playing with animals like dog. Before administering the test, Psychologist interact with the chief so as to win his cooperation. CAT brings to light the child's repressed desires. The tantoplione is another projective technique introduced by B.F. Skinner. In this technique, the individual is encouraged to pay attention while a phonograph reproduces at low intensity different speech samples in an individual's voice. The individual is instructed to speak what is his mind as he hears each speech sample in the same way he might interpret an ink-blot. Therefore, it is the auditory Rosschach method. Play Techniques is another projective technique. This technique is highly useful to children as compare to adults. The individual is permitted to construct scenes by using building materials like dolls, toys and blocks. Another important technique is the word-association method (WAM) in which the individual is given list of words, one at a time instructing him to react with the first word that comes into his mind. The investigator record the time required for each response and the responses themselves. Living the average number of time and the content of unusual responses assist the investigator to detect certain attitudes or anxieties of the individual.

The Psycho-Analytic Method was propounded by Sigmund Freud. **The** Psycho-analytic method of personality measurement has two types of test- Free association test. In free association, the individual is allowed discuss his or her thoughts, dreams, memories, or words, in regardless of articulacy (Freud, 1953). The individual is permitted to speak without discontinue in a stream of words. Sigmund Freud believed that this non-linear way of thinking would bring about unconscious mind. Freud developed this method by permitting his patients to speak about things that came to their minds freely. Freud then decided examine the information to provide repose or relief from their mental disorder. Dream Analysis Method is another technique used by the Psycho-analysts. Dream analysis is a technique rooted in psychoanalysis but is also used in other forms of psychotherapy. The aims of this technique is to uncover and interpret the content of dreams, that is, the hidden and unconscious symbolic meaning and motivations of the dreams.

Freud's theory opined that dreams represent people's desires, drives and thoughts. Society sees these desires unacceptable, so people suppress or subdue them, which are later displayed in their dreams. And these dreams guide their behaviour subconsciously.

Assessment of students' academic achievement is a basic aspect of teaching and learning process. It helps teachers to address the current issues in educational assessment and to measure teaching and learning effectiveness of students' achievement. Hence, assessment is vital in tailoring learners towards learning. However, the judgement of the general public regarding the standard and quality of education in Nigeria has become apparent due to the poor academic performance of students in external examinations like WAEC, NECO and NABTEB mainly in key subjects like Mathematics and English Language. It has been discovered by psychologists and researchers such as Busato, et al (2000), Chamorro-Permuzic (2003), Steel (2007), Obilor & Sakpege (2022) and many others that personality traits like the Big Five Personality Model such as Openness, Conscientiousness, Extroversion, Agreeableness and Neuroticism negatively or positively influences students' academic achievement. These problems persistently occur and cannot be disregarded. Students' academic achievement do not adhere to what parents invest on their children and also what the government expect from the students. To unravel the elements responsible for poor academic achievement among students, experts and researchers decided to study different factors at different instances that could be responsible for poor academic achievement (Schunk, 2012). Such elements as study habit, slothfulness, financial constraint, broken home, discouragement, despair, difficulty in understanding, information overload and many others.

Researchers and psychologists have provided measures such as Autobiography, Case history method, Interview, Questionnaire, Miniature life

situations, Rating scale, Personality inventory, Rorschach Ink Blot test, Thematic Apperception test, Children's Apperception test, Free association test and many others to help in tackling these problems. Given the inconsistent findings reported by researchers on the relationship between the Big Five personality model and students' academic achievement, it is necessary that a study be carried out to investigate the prediction of these variables for the purpose of bridging the gap. This study is very necessary in Benin Metropolis as no studies have examined the role of personality trait in predicting academic achievement of secondary school students. Thus, this study intended to examine the Personality Traits as Predictors of Academic Achievement of Secondary School Students in Benin Metropolis.

Research Questions

The following Research Questions were raised to guide the study:

1. To what extent do openness, conscientiousness, extraversion, agreeableness and neuroticism predict public secondary school students' academic achievement in Benin Metropolis?
2. To what extent does openness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis?
3. To what extent does conscientiousness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis?
4. To what extent does extraversion significantly predict male and female public secondary school students' academic achievement in Benin Metropolis?
5. To what extent does agreeableness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis?
6. To what extent does neuroticism significantly predict male and female public secondary school students' academic achievement in Benin Metropolis?

Hypotheses

1. Openness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.
2. Conscientiousness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.
3. Extraversion does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.
4. Agreeableness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.
5. Neuroticism does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Methodology

The descriptive survey research design was adopted in the study. The population comprised all the senior secondary school two (SSII) students in public secondary schools in Benin Metropolis. The sample size was two hundred (200) senior secondary school two (SS2) students. Simple random sampling technique was used to select twenty (20) students from ten (10) public secondary schools using balloting. The instrument used for data collection was researcher self-structured questionnaire titled “Students Personality Assessment Questionnaire (SPAQ)” which was used to measure the personality traits of students and proforma was used to collect students scores. The questionnaire was divided into two sections- Section A comprised the personal data of the respondent which include; sex and age while Section B comprised 20 items rated on a 4 point likert scale in the order of SA=Strongly Agree, A= Agree, D= Disagree and SD= Strongly Disagree with each of the points assigned a value as follows: SA =4, A=3, D=2, SD=1. The instrument was validated by three experts in the field of Measurement and Evaluation. The reliability of the instrument was determined using Cronbach Alpha and the reliability co-efficient of 0.77 was obtained. The instrument was administered to the students by the researcher. Hypothesis 1 was tested using mean and standard deviation while hypotheses 2 to 5 were tested using Linear Regression Analysis. All hypotheses were tested at 0.05 level of significance.

Research Question One: To what extent do openness, conscientiousness, extraversion, agreeableness and neuroticism predict public secondary school students’ academic achievement in Benin Metropolis?

Table 1: Descriptive Statistics Summary on the extent openness predict public secondary school students’ academic achievement in Benin Metropolis

SN	Items	N	Mean	Std	Decision
1.	I am good at coming up with new ideas during teaching	200	3.10	0.650	Agreed
2.	I often think about the deeper meaning of things taught in class	200	2.83	0.673	Agreed
3.	I am curious about knowing new topics	200	3.35	0.913	Agreed
4.	I appreciate being around intelligent people in the class	200	3.74	0.504	Agreed
Cluster Mean			2.97	.660	
(Cut-off point= 2.5)					

Table 1 revealed the mean of 3.10, 2.83, 3.35 and 3.74 with the corresponding standard deviation of 0.650, 0.673, 0.913 and 0.504 respectively of positive worded items revealed that openness positively predicts public secondary school students’ academic achievement in Benin Metropolis.

This table revealed the calculated mean of 2.97 and standard deviation of .660. The calculated mean is greater than the cut-off point of 2.5. This implies that the prediction of openness towards public secondary school students’ achievement is positive

Table 2: Descriptive Statistics Summary on the extent conscientiousness predict public secondary school students' academic achievement in Benin Metropolis

SN	Items	N	Mean	Std	Decision
1.	Attentiveness of my teachers makes me concentrate in class and enables me to learn hard	200	3.31	0.629	Agreed
2.	I perform well in class because my teachers make good use of teaching and learning resources at the appropriate time	200	3.18	0.622	Agreed
3.	I prepare adequately for examinations because my teachers make effective use of instructional periods to complete their syllabus on time	200	3.05	0.728	Agreed
4.	I am able to do well in my examinations when my teachers finish their syllabus on time	200	3.31	0.758	Agreed
	Cluster Mean		3.05	.734	

(Cut-off point= 2.5)

Table 2 revealed the mean of 3.31, 3.18, 3.05 and 3.31 with the corresponding standard deviation of 0.629, 0.622, 0.728 and 0.758 respectively of positive worded items revealed that conscientiousness positively predicts public secondary school students' academic achievement in Benin Metropolis. This table revealed the calculated mean of 3.05 and standard deviation of .734. The calculated mean is greater than the cut-off point of 2.5. This implies that the prediction of conscientiousness towards public secondary school students' achievement is positive

Table 3: Descriptive Statistics Summary on the extent extraversion predict public secondary school students' academic achievement in Benin Metropolis

SN	Items	N	Mean	Std	Decision
1.	I suddenly feel shy when I want to speak during teaching	200	2.69	0.953	Agreed
2.	I usually feel worry when I unable to answer questions I know	200	2.89	0.791	Agreed
3.	I am fairly self-confident when answering questions in class	200	3.37	0.556	Agreed
4.	I am mostly quiet when I am with my classmates	200	2.37	0.738	Disagreed
	Cluster Mean		2.65	.561	

(Cut-off point= 2.5)

Table 3 revealed the mean of 2.69, 2.89 and 3.37 with the corresponding standard deviation of 0.953, 0.791 and 0.556 respectively of positive worded items revealed that conscientiousness positively predicts public secondary school students' academic achievement in Benin Metropolis. The table equally revealed the mean of 2.37 with a corresponding standard deviation of 0.738 respectively of negative worded items revealed that conscientiousness negatively predicts public secondary school students' academic achievement in Benin Metropolis. This table revealed the calculated mean of 2.65 and standard deviation of .561. The calculated mean is greater than the cut-off point of 2.5. This implies that the prediction of extraversion towards public secondary school students' achievement is positive

Table 4: Descriptive Statistics Summary on the extent agreeableness predict public secondary school students' academic achievement in Benin Metropolis

SN	Items	N	Mean	Std	Decision
1.	I am good at obstructing my fellow classmate during teaching	200	1.69	0.852	Disagreed
2.	I boast about my intelligence in class	200	2.08	0.847	Disagreed
3.	I am good in contradicting my classmates during teaching and learning process	200	2.14	0.880	Disagreed
4.	I use other students ideal to pass my examinations	200	2.29	0.954	Disagreed
Cluster Mean			2.17	.890	

(Cut-off point= 2.5)

Table 4 revealed the mean of 1.69, 2.08, 2.14 and 2.29 with the corresponding standard deviation of 0.852, 0.847, 0.880 and 0.954 respectively of negative worded items revealed that agreeableness negatively predicts public secondary school students' academic achievement in Benin Metropolis. This table revealed the calculated mean of 2.17 and standard deviation of .890. The calculated mean is lesser than the cut-off point of 2.5. This implies that the prediction of agreeableness towards public secondary school students' achievement is negative

Table 5: Descriptive Statistics Summary on the extent neuroticism predict public secondary school students' academic achievement in Benin Metropolis

SN	Items	N	Mean	Std	Decision
1.	I easily feel embarrassed when I am unable to answer questions in class	200	3.25	0.747	Agreed
2.	I am often afraid of those teachers that are hostile when teaching	200	2.61	1.406	Agreed
3.	I find it difficult to sit in an examination hall without fidgeting	200	2.19	0.937	Disagreed
4.	I am mostly quiet when I am with my classmates	200	2.35	1.007	Disagreed
Cluster Mean			2.38	1.12	

(Cut-off point= 2.5)

Table 5 revealed the mean of 3.25 and 2.61 with the corresponding standard deviation of 0.747, and 1.406 respectively of positive worded items revealed that neuroticism positively predicts public secondary school students' academic achievement in Benin Metropolis. The table equally revealed the mean of 2.19 and 2.35 with a corresponding standard deviation of 0.937 and 1.007 respectively of negative worded items revealed that neuroticism negatively predicts public secondary school students' academic achievement in Benin Metropolis. This table revealed the calculated mean of 2.38 and standard deviation of 1.12. The calculated mean is lesser than the cut-off point of 2.5. This implies that the prediction of neuroticism towards public secondary school students' achievement is negative.

Testing Hypotheses

Hypothesis One: Openness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Table 6: Simple Linear Regression on openness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	.324	1	.324		
Residual	49.656	198	.251	1.291	0.257
Total	49.980	199			

Table 6 showed calculated F-value of 1.291 and a P-value of 0.257, testing at an alpha level of 0.05. The F-value of 1.291 was greater than the alpha value level of 0.05. So, the null hypothesis was rejected. This means that openness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis.

Hypothesis Two: Conscientiousness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Table 7: Simple Linear Regression on conscientiousness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	1.370	1	1.370		
Residual	48.610	198	.246	5.581	0.19
Total	49.980	199			

Table 7 showed calculated F-value of 5.581 and a P-value of 0.19, testing at an alpha level of 0.05. The F-value of 5.581 was greater than the alpha value level of 0.05. So, the null hypothesis was rejected. This means that conscientiousness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis.

Hypothesis Three: Extraversion does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Table 8: Simple Linear Regression on extraversion significantly predict male and female public secondary school students' academic achievement in Benin Metropolis

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	2.056	1	2.056		
Residual	47.924	198	.242	8.496	0.004
Total	49.980	199			

Table 8 showed calculated F-value of 8.496 and a P-value of 0.004, testing at an alpha level of 0.05. The F-value of 8.496 was greater than the alpha value level of 0.05. So,

the null hypothesis was rejected. This means that extraversion significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis.

Hypothesis Four: Agreeableness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Table 9: Simple Linear Regression on agreeableness significantly predict male and female public secondary school students' academic achievement in Benin Metropolis

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	1.440	1	1.440		
Residual	48.540	198	.245	5.874	0.016
Total	49.980	199			

Table 9 showed calculated F-value of 5.874 and a P-value of 0.016, testing at an alpha level of 0.05. The F-value of 5.874 was greater than the alpha value level of 0.05. So, the null hypothesis was rejected. This means that agreeableness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis.

Hypothesis Five: Neuroticism does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Table 10: Simple Linear Regression on neuroticism significantly predict male and female public secondary school students' academic achievement in Benin Metropolis

Model	Sum of Square	Df	Mean Square	F	Sign
Regression	.892	1	.829		
Residual	49.151	198	.248	3.341	0.069
Total	49.980	199			

Table 10 showed calculated F-value of 3.341 and a P-value of 0.069, testing at an alpha level of 0.05. The F-value of 3.341 was greater than the alpha value level of 0.05. So, the null hypothesis was rejected. This means that neuroticism significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis.

Table 11: Coefficient of the Big Five Personality Model on public secondary school students' academic achievement in Benin Metropolis

	Unstandardized Coefficients		Standardized Coefficients	t	Sign
Model	B	Std. Error	Beta		
Constant	1.848	0.488		3.785	0.000
Openness	0.057	0.027	0.179	2.124	0.035
Conscientiousness	0.073	0.020	0.262	3.585	0.000
Extraversion	0.035	0.011	0.282	3.259	0.001
Agreeableness	0.047	0.015	0.247	3.203	0.002
Neuroticism	0.015	0.016	0.073	0.887	0.376

Table 11 showed a beta value of 0.179, t-value of 2.124 and P-value of 0.035 for Openness, a beta value of 0.262, t-value of 3.585 and P-value of 0.000, for Conscientiousness, a beta value of 0.282, t-value of 3.259 and P-value of 0.001, for Extraversion. A beta value of 0.247, t-value of 3.203 and P-value of 0.002 for Agreeableness and a beta value of 0.073, t-value of 0.887 and P-value of 0.376. From the table above, it showed that the Big Five Personality Model significantly predict public secondary school students' academic achievement in Benin Metropolis. Which of the Big Five Personality Model were predictors? The beta co-efficient showed that Extraversion personality model is the highest predictor, followed by Conscientiousness Personality Model as the second highest, followed by Agreeableness Personality Model as the third highest, Openness Personality Model as the fourth highest and Neuroticism as the fifth Personality Model.

Discussion of Findings

The finding of research question one revealed that all the mean in openness, conscientiousness and extraversion positively predict public secondary school students' academic achievement while in neuroticism, the mean of 3.25 and 2.61 with a corresponding standard deviation of 0.747 and 1.406 respectively of positive worded items revealed that neuroticism positively predict public secondary school students' academic achievement. The finding is in agreement with the findings of those of: Rothmann and Coetzer (2003), Moran and Garies (2014), Alanoud and Amir (2016), Ninette, Meiring and Wiernik (2017), Chandrasekara (2019), whose findings revealed that there is a positive significant relationship between the five big factors and students' academic achievement in schools. This finding also agrees with that of Kim, Verena and Robert (2019) whose findings revealed that, overall, teacher big five domains was positively associated with teacher effectiveness and students' achievement. The finding also in agreement with the findings of Obilor, & Sakpege (2022). The findings show that the big five domains except neuroticism predict students' academic achievement positively. The findings also revealed that all the mean in agreeableness negatively predict public secondary school students'

academic achievement while in neuroticism, the mean of 2.19 and 2.35 with a corresponding standard deviation of 0.937 and 1.007 respectively of negative worded items revealed that neuroticism negatively predict public secondary school students' academic achievement. The finding is in agreement with the findings of Judge and Cable (2006) who find that the big five domains are negatively correlated with job productivity. The finding is also in agreement with the findings of Paunonen, (1998) and Rothstein, et. al. (1994) who reported negative association between agreeableness and students' academic achievement.

The finding of hypothesis one revealed that openness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis. The null hypothesis of openness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis was rejected. This means that openness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis. This finding is in agreement with the findings of Chamorro-Premuzic & Furnham, 2005; Phillips, Abraham & Bond, 2003 who in their studies determine openness to experience and students' academic achievement. The findings revealed that openness to experience significantly predict students' academic achievement.

The finding of hypothesis two revealed that conscientiousness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis. The null hypothesis of conscientiousness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis was rejected. This means that conscientiousness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis. This finding is in agreement with the findings of Moyosola (2013) who carried out study on Personality Characteristics as Predictors of Academic Performance of Secondary School Students. This study revealed that personality dimensions jointly and relatively predicted students' academic performance. This finding is also in agreement with the findings of O'Connor and Paunonen (2007) and Nofle and Robins (2007) who in their findings revealed that conscientiousness significantly predicts students' performance in secondary schools.

The finding of hypothesis three revealed that extraversion does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis. The null hypothesis of extraversion does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis was rejected. This means that extraversion significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis. This finding is in agreement with the finding of Rothstein et. al. (2014) whose finding revealed that extraversion significantly predict students' academic achievement.

The finding of hypothesis four revealed that agreeableness does not

significantly predict male and female public secondary school students' academic achievement in Benin Metropolis. The null hypothesis of agreeableness does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis was rejected. This means that agreeableness significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis. This finding is in agreement with the findings of Poropat (2014) and Vermetten (2011) who in their studies revealed that agreeableness facilitate learning and therefore agreeableness has a significant impact of agreeableness on students' academic performance. This finding is also in agreement with the findings of Ntu et al (2022) who in their studies revealed that teacher's agreeableness influence secondary school students' English language academic achievement in Ogoja education zone of Cross River State.

The finding of hypothesis five revealed that neuroticism does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis. The null hypothesis of neuroticism does not significantly predict male and female public secondary school students' academic achievement in Benin Metropolis was rejected. This means that neuroticism significantly predicts male and female public secondary school students' academic achievement in Benin Metropolis. This finding is in agreement with the findings of De Raad and Shouwenburg (2006) and Eysenck (2006) who in their studies revealed that neuroticism significantly predict students' academic performance.

Conclusion

The findings revealed that openness, conscientiousness and extraversion and neuroticism positively predict public secondary school students' academic achievement while agreeableness negatively predict public secondary school students' academic achievement. The findings also revealed that the five big domains significantly predict male and female public secondary school students' academic achievement in Benin Metropolis.

Recommendations

It was therefore recommended based on the findings that;

1. Students who possesses openness, contentiousness, extraversion and neuroticism personality trait can achieve better academically.
2. Those students possessing agreeableness personality trait, teacher may guide them towards attaining better academic achievements.
3. School management should employ the services of experts to give seminars and workshop to both students and teachers on personality traits and their effects on students' academic achievement.

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