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Personality Characteristics, Psychological Wellbeing and Academic Success among University Students

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Abstract

Attending university can be very stressful as students have to go through the process of adapting to new educational and social environments; this experience of difficult change affects student's psychological wellbeing and subsequently their success in academics. This study examines personality characteristics, psychological wellbeing and academic success among Nigerian undergraduates. While cross sectional design and convenient sampling method were employed, 214 undergraduates were sampled. A structured questionnaire focusing on socio-demographic information, personality profile, psychological wellbeing and academic success was administered to the participants. The data were analyzed using descriptive and inferential statistics. The result reveals that agreeableness, conscientiousness and openness to experience had a significant positive relationship with psychological well-being, while agreeableness, conscientiousness and openness had positive relationship with academic success; meanwhile, neuroticism had negative relationship with academic success. Furthermore on a regression model, personality characteristics did not independently but jointly predicted psychological wellbeing. Meanwhile personality characteristics independently and jointly predicted academic success. The study conclude that student's personality characteristics are important for sound psychological wellbeing and effective academic success among Nigerian undergraduates

Introduction

Attending university can be very stressful for students especially when they have to go through the process of adapting and adjusting to new educational and social environments; mixing with new and different friends from diverse backgrounds and experiences; coupled with different cultural values and norms, high self-expectations and new mode of conversation and language, apart from academic demands (Chen, et. al., 2013). This experience of difficult changes and challenges affects their psychological wellbeing and concurrently their success in academics, and if not well managed, this can lead to depressive system in students (Compass, 2004). As a result of this, Porter (1998) documented that up to 60% of university dropout left university due to inability to manage psychological conditions such as depression, anxiety, and maladjustment resulting from their

academic activities. Underachievement as a problem among students has become a disturbing dimension, as West Africa Examination Council documented low student's academic performance in five consecutively from 2006 through 2010 (Shabbir & Rukhsana, 2011). Similarly underachievement was documented among Nigerian students due to some factors including inadequate funding, outdated research facilities, insufficient number of personnel to mention but few (Nwosu et al., 2017; Jaja, 2013; Saint et al., 2003); as students seek novel ways to pass and succeed in their examinations (Lawal, 2016; Adeyemi, 2016; Eyong et al., 2014). Even though, the extent to which student accomplishes their academic goals especially in serene academic environment cannot be overlooked (Festa-Dreher, 2012), as this precursor to academic success. In this, academic success is the general academic skills which involve a combination of effort expended by student in terms of study skill, self-organizational strategies and abilities to perform well academically (Welles, 2010). Besides, scholars have established that differences in student's psychological well-being and their success in academics could be attributed to individual differences (Poropat & Corr, 2015; Eyong et al., 2014; Meera et al., 2009). Specifically, several researchers found that personality characteristics significantly influence psychological well-being (Skomorovsky & Dursu, 2018; Skomorovsky, 2009a; Costa & McCrae, 1980).

Moreover, In Deci and Ryan's (2008) self-determination theory posited that, personality traits and human motivations encompass both inborn psychological needs and intrinsic growth tendencies, and these are responsible for human self-determined growth and success in life (Ryan et al., 2008). From the components of academic success as explained in self-determination theory, students have inherent motivation to absorb, explore autonomously and without hindrances, and also master their surroundings as they relate with people and various individuals, by holding high self-esteem and psychological competence about their fundamental psychological nutrients or needs of life, students ensure that they are dogged to perform excellently in their academics as they pursue their academic career. Similarly, as personality traits play key roles in ensuring persistent strong-will in students, contents of present psychological well-being in individual increase student quest to succeed and achieve in their life. Hence, the key elements of students' academic success include their need for psychological competence, relatedness and autonomy in carrying out their day-to-day academic activities serves as the important route connecting the psychological well-being and academic success (Welles, 2010). In Diener, (1984) and Keyes, (2006), psychological well-being was defined as the individual's feeling of happiness and satisfaction with self-activities and accomplishments, by meeting the daily demands and having a personal sense of meaning. Thus, psychological wellbeing is the process of positive assessment of individual's life and personal history, and the feeling of constant personal growth and development, that is built on quality of relationship with other (Ryff, & Keyes, 1995; Ryff, 1989), which are underscored by the individual innate abilities.

Explicitly, the five-factor model of personality (also called the Big five, FFMP) becomes the most studied personality characteristics framework (Block, 2010), which described personality as consisting of five basic domains. These domains are neuroticism also known as the emotional instability, openness also called intellect and imagination, extraversion which is known to be sociability and assertiveness; others are agreeableness known to be warm, kind and trusting and conscientiousness which is identified as being reliable and organized (von Stumm & Ackerman, 2013; Costa & McCrae, 1992). Specifically, openness to experience personality

explains measurement of variability in a person's imagination, the depth, the breadth and individual's urge for experiences. Openness personality factor can be called as the openness to new ideas and intellect, individual's interest to educational and cultural capacity which although could be varied by cognitive and other sensory experiences. Students who are high on openness to experience personality domain possibly have broad interest, novelty and liberal in their ways. Meanwhile, conscientiousness personality focused on the amount of control over impulses and other goal-directed behaviors. Conscientiousness has been interrelated with the willingness to achieve in life including educationally. Students who are conscientious concentrate on few numbers of goals, even though they may strive hard to get to the top of their goals and achieve them. These individuals are more competent in things they do and orderly in most of their endeavor, responsible, thorough and dutiful (Costa & McCrae, 1992).

Additionally, students with extraverted oriented individuals are more physically and verbally active, coupled with the fact that, these individuals are independent, like being alone, reserved but steady in their pursuits, adventurous and assertive. Extraverts are frank, sociable and also talkative (Brown & Treviño 2006; Costa & McCrae, 1992; Thoroughgood et al., 2012). Moreover, agreeableness personality has been found according to Thouroughgood et al., (2012) to be linked to caring, emotional support, altruism, nurturance, hostility, indifference, self-centeredness, spitefulness and jealousy. Other personality characteristics like altruism, gentle, kind, sympathetic and warm and associated are found to be presence in students with agreeableness personality. These individuals are fitted to be excellence in their academic work as their emoting is stable (Kalshoven et al., 2011 ; Coasta & McCrae, 1992). Neuroticism measures emotional and affect control. Individuals who are low on neuroticism are bound to emotional stable, while people who are high on neuroticism are like to experience negative emotions. Students who are high on neuroticism personality can possibly be reactive and become easily bothered by what happens or going on in their environment, these students are easily stressed and they may not want to persist in academic challenges or difficulties (Antes et al., 2007; Costa & McCrae, 1992).

Studies have shown various correlations among personality characteristics and psychological wellbeing in meta-analytic review (Anglim et al., 2020; Steel et al., 2019; Steel et al., 2008). Similarly, Reza, et al.'s (2015) discovered a significant negative connection between psychological wellbeing and neuroticism personality trait, meanwhile, agreeableness and extraversion personality traits positively related with psychological wellbeing. The authors further reported among Iranian students that, psychological wellbeing significantly showed no interactions with openness to experience and conscientiousness personality traits Also, Ullah, (2017) found out that neuroticism trait negatively predict psychological wellbeing, meanwhile openness, conscientiousness and extraversion traits positively predicted psychological well-being; however, agreeableness did not predict psychological wellbeing. Additionally, Bello, (2016) discovered that dimensions of big-five personality traits jointly predict psychological health, with neuroticism independently predicts psychological health and extraversion, agreeableness, conscientiousness, openness having no significant prediction on psychological health. Meanwhile, Anglim and Grant, (2016); Meléndez et al., (2019), and Sun et al., (2018) documented a significant relationship in the domains of FFMP and psychological wellbeing.

Similarly, FFMP traits have been found to associate with excellent academic results and performances (Poropat,

2009; Rohde & Thompson, 2007; O'Connor & Paunonen, 2007), especially among Italy students (Troncone et al., 2014). Precisely, conscientiousness, extraversion, openness and agreeableness have been found to positively predicted successful academic performance, while neuroticism negatively predicted successful academic performance (Vedel et al., 2015; Ludeke, 2014; Meera et al., 2011) with most academic success, performance and achievement of students rely basically on their personality characteristics (Yoke & Chooi 2015; Alda et al., 2014; Poropat, 2014; Laidra et al., 2007). Lounsbury et al., (2004) stated in their study that, conscientiousness and openness personality traits are closely linked with academic outcomes. In another way, Eyong, et al.'s (2014) study among Nigerian students in secondary school, the authors found out a significant difference in academic achievements and levels of agreeableness and conscientiousness and agreeableness, whereas attentions to students in tertiary institutions were totally ignored.

However, Vikanda, et al.,(2012) reported in thier study that, openness, conscientiousness, and agreeableness were significant contributors of successful academic performance among students of tertiary institution. Conversely, Poropat's (2009; 2016); and Vedel and Poropat (2017) findings consistently established in their studies among students of primary, secondary and tertiary institutions, conscientiousness was solely and consistently related to effective academic performance, meanwhile, studies across students of secondary and tertiary, openness, emotional stability, agreeableness and extraversion were less correlated with academic performance. Based on the literature review, empirical data on the influence of personality characteristics on psychological wellbeing and academic success among undergraduates is very limited in the context of Sub-Saharan Africa especially among Nigerian sample, the few published studies (Nwosu et al.,2018; Eyong, et al.,2014; Agbakwuru, 2000) were either among secondary school students or teachers. More so, there are inconsistencies in the findings of these researchers such as Reza, et al.(2015); Ullah, (2017); Skomorovsky and Dursu, (2018); Vikanda, et al.,(2012); Poropat (2016). This gap in literature raises the need to further investigate these psychological factors among Nigerian undergraduates.

This study therefore, examines the personality characteristics, psychological wellbeing and academic success among Nigerian Undergraduates. Hence, the present study is relevance in the management of undergraduates' academic performance and psychological wellbeing. Following the review of literature, subsequent research questions were generated: Will conscientiousness, openness to experience, agreeableness, extraversion and neuroticism personality characteristics significantly associate with psychological wellbeing and academic success? Will extraversion, conscientiousness, agreeableness, openness and neuroticism personality characteristics significantly predict psychological wellbeing and academic success? Based on these research questions, three hypotheses would be tested:

1. Conscientiousness, agreeableness, extraversion, neuroticism and openness personality characteristic will significantly correlate with psychological wellbeing and academic success
2. Agreeableness, conscientiousness, openness, neuroticism and extraversion personality characteristic will significantly predict psychological wellbeing.
3. Conscientiousness, agreeableness, openness, extraversion and neuroticism personality characteristic will significantly predict academic success

Method

Research Design

This study employed cross sectional design. Independent variables included were the domains of the big five personality characteristics including agreeableness, conscientiousness, neuroticism, extraversion and openness to experience. The dependent variables were psychological wellbeing and academics success

Sampling Procedure

This study adopted convenient sampling technique in the selection of participants into the study.

Participants

The participants of the study were total of two hundred and fourteen (214) undergraduates' students of the Lead City University, Ibadan, Oyo State. Nigeria. The age at which students were admitted into university in Nigeria varies between 15 and 18years depending on the institution policy. In this study, their age ranged between 18 years and 58 Years (\bar{X} = 26.33; SD= 7.5). On gender, 136(63.6%) of the participants were male, 78(36.4%) were female. On religion, 163(76.2%) are Christian, 43(20.1%) are Islam, and 8(3.7%) belong to other religion. On ethnicity, 146(68.2%) were Yoruba, 18(8.4%) were Igbo, 25(11.7%) were Hausa, and 25(11.7%) belonged to other ethnic background. On level of study, 52(24.3%) were in 100 level, 35(16.4%) were in 200 level, 41(19.2%) were in 300 level, 69(32.2%) were in 400 level, and 17(7.9%) were in 500 level. On family background, 147(68.7%) were from monogamous background, 67(31.3%) were from polygamous background.

Research Instruments

Structured questionnaires were used to source for information from the participants of the study which consists Section A, B, C, and D.

Section A: Consists of the demographic characteristics of the participants such as age, gender, religion, ethnicity, student's level and family background.

Section B: Five Factor Personality Inventory (FFMP Scale) which was developed by John and Srivastava (1999), with 44-items measuring an individual on the dimensions of FFMP traits comprising conscientiousness, agreeableness, neuroticism, openness and extraversion. The scale was in 5-point Likert scale response format, with response ranges from disagree strongly (1) to agree strongly (5). Some of the items were negatively phrased, this items are denoted by 'R', the participant's personality characteristics were determined by adding up all responses on each domain to a sum score with score range from 8 to 50 points. The scale is scored based on its subscale. According to the author, the internal consistency for each domain ranges from 0.70 to 0.95, while in this study, the psychometric coefficient of the sub-scales reported in Cronbach alpha included conscientiousness as .60, agreeableness as .77, neuroticism as .58, openness to experience as .62 and

extraversion as .69.

Section C: General Academic Skills of Academic Success Inventory (Welles, 2011) adapted to measure academics success in this study. According to the author, each domain of the inventory can measure some levels of academic success. Though the domain (General Academic Skills) was first piloted (and recorded a Cronbach Alpha of 0.73), before it (general academic skill) was used in the study to measure academic success. The reported Cronbach alpha in the study was .81. The inventory has 50-item with ten subscales: General Academic Skills, External Motivation/Future, Socializing, Career Decidedness, Internal Motivation/Confidence, Instructor Efficacy, Lack of Anxiety, Personal Adjustment, Concentration and External Motivation Time had .93, .86, .92, .87, .88, .84, .87, .77, .86, .62 Cronbach alpha respectively as reported by the author. The items of the scale are directly scored with the scores ranging from 50 to 500. The higher scores denote increased academic success. The scale manual indicated that each domain can be measured independently and compositely. The response format of the scale was in 5-point Likert format, these responses ranges from (1) strongly disagree to (5) strongly agree.

Section D: This section measures psychological well-being, the instrument was developed by Ryff and Keyes (1995) which is called Ryff's Psychological wellbeing scale. It consists of eighteen items with six domains (including environmental-mastery, autonomy, purpose in life, positive relations, self-acceptance, and personal growth). The items were rated on five-point Likert format which ranges from, completely disagree (1) to completely agree (6). The scores of the scale range between 18-108. About six of the items were negatively worded. The authors described that the scale can be scored based on its domains and composite, the author further stated revealed that the scale internal constituency ranges between 0.40 and 0.95; while 0.85 was reported for the whole scale. Higher scores denote higher level of reported psychological well-being and vice versa, in this study, the Cronbach Alpha of the instrument was 0.89.

Research Setting

The study took place in Lead City University, Ibadan, Oyo State, Nigeria. Upon the arrival of the researchers to the research setting, the researchers visited each of the participants at the end of their respective lecture on campus and take their informed consent. The researchers explain the aims of the study to the students as their permission were sought. For students who consented to participate, were given questionnaire to fill it. The participants were also given the opportunity to withdraw when they feel so. Participants and setting were conveniently selected due to the accessibility and proximity research data/participants and the recent call for the need to assess students' psychological wellbeing by the school authority. Participants were also instructed and guided on how to respond to the questionnaire after attending to their questions for better clarification, they were assured of their confidentiality in participating in the study and then given a copy to respond to. After one week of 220 questionnaires administration, 214 were satisfactorily filled which was about 97% response rate. All participants were appreciated for their active participation in the research. The Statistical Package for the Social Sciences (SPSS) was used as the collated data were subjected to different statistical tools based of the objectives of the study.

Statistical Analysis

Initially, correlation, tolerance and the Variance Inflation Factors (VIF) analyses were conducted to establish no multicollinearity, while scatter plot were conducted to reveal the presence of homoscedasticity among variables of study. Then, hypothesis one was tested using Pearson product moment correlation, this is because the variables appeared to interval/continuous, coupled with the fact that researchers were interested in the linear relationship among variables of study. Hypotheses two and three were analyzed using multiple regression analysis because the variables are measured using interval scale of measurement and the researchers were interested in the predictive roles played by the personality characteristics on the psychological wellbeing and academic success of the students respectively.

Results

Table 1 shows test for hypothesis one which indicated that there will be a significant association among conscientiousness, agreeableness, extraversion neuroticism and openness personality characteristics, academic success and psychological well-being. From the Zero Order correlation analysis results, psychological wellbeing ($r=.36, p<.01$) significantly associated with academic success. This outcome shows that, psychological wellbeing positively related to academic success, as students' psychological wellbeing becomes better, the higher their academic success. When student's psychological wellbeing is improved, there is tendency for their better academic success.

Table 1. Correlation Analysis among Personality Characteristics (Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience), Psychological Wellbeing, and Academic Success

Variables of Study	1	2	3	4	5	6	7	\bar{X}	SD
1 Psychological Well-Being	-							73.3	17.8
2 Academic Success	.36**	-						63.2	14.2
3 Extraversion	-.01	.07	-					23.5	4.2
4 Agreeableness	.26**	.46**	-.19**	-				29.8	5.8
5 Conscientiousness	.24**	.49**	-.10	.48**	-			28.6	5.0
6 Neuroticism	-.01	-.22**	.02	-.12	-.05	-		23.2	3.8
7 Openness to experience	.39**	.49**	.12	.49**	.54**	.04	-	31.6	6.1

Based on students personality characteristics, extraversion ($r=-.01, p>.05$) had no significant relationship with psychological wellbeing. Meanwhile, conscientiousness($r=.24, p<.01$) and agreeableness ($r =.26, p<.01$) significantly related with psychological well-being. Specifically, students who reported more agreeableness personality have higher tendency to have better psychological wellbeing. Also, students who are more conscientious significantly have more predispositions toward netter psychological wellbeing. However, neuroticism ($r = -.01, p>.05$) had no significant relationship with psychological wellbeing. Meanwhile, openness to experience ($r = .39, p<.01$) significantly and positively correlated with psychological well-being, this indicates that students who are more openness to experience have higher propensity to experience better

psychological well-being. Additionally, extraversion ($r=.07$, $p>.05$) had no significant association with academic success; on the other hand, agreeableness ($r=.45$, $p<.01$) and conscientiousness ($r=.49$, $p<.01$) significantly linked with academic success, it is shown in this result that, agreeableness and conscientiousness significantly and positively related with related academic success. In this result, students who reported more agreeableness and conscientiousness personality characteristics have tendency to report better academic success. Conversely, as neuroticism ($r = -.22$, $p<.01$) had a significant negative relationship with academic success, openness to experience ($r = .49$, $p<.01$) have a significant positive correlation with academic success. In this result, individuals who reported more neuroticism personality characteristics have fewer tendencies to succeed in their academic. Meanwhile, students who are more open to experience have better chances to record good academic success. Hence, the first hypothesis is partially confirmed while the null hypothesis is rejected.

Table 2 shows regression analysis for alternative hypothesis two which stated that, conscientiousness, agreeableness, neuroticism, openness, and extraversion personality characteristics will significantly predict psychological well-being. The result showed that extraversion ($\beta=-.034$, $t=-.507$, $p>.05$), conscientiousness ($\beta=.006$, $t=.071$, $p>.05$), agreeableness ($\beta=.007$, $t=.960$, $p>.05$) and neuroticism ($\beta=-.008$, $t=-.126$, $p>.05$) did not independently predict psychological wellbeing. However, openness ($\beta=.350$, $t=4.185$, $P<.05$) independently predict psychological well-being. This result shows that students' openness to experience significantly shows about .35 positive impact on psychological wellbeing. In this, openness to experience contributed to about 4.2 extent of relationship in predicting psychological wellbeing.

Table 2. Results of Multiple Regression Analysis: Prediction of Psychological Well-Being

Personality Characteristics	R	R ²	F	P	β	t	P	Tolerance	VIF
Extraversion					-.034	-.507	$p>.05$	.98	1.02
Agreeableness					.007	.960	$p>.05$	.63	1.58
Psychological Well-Being	.396	.157	7.73	<.05	.006	.071	$p>.05$	.63	1.58
Conscientiousness					.008	.126	$p>.05$	.98	1.13
Neuroticism					.350	4.185	$p<.05$	.58	1.72
Openness									

Note: *n.s* denotes 'Not Significant or $p>.05$ '; *VIF*: Variance Inflation Factors

Furthermore, conscientiousness, agreeableness, neuroticism, openness, and extraversion personality characteristics jointly predict psychological well-being ($R=.396$, $R^2=.157$, $F(5,208)=7.735$, $p<.05$). The result indicated that personality characteristics contributed .39 degree of relationship with psychological wellbeing and about 15.7% variability of the psychological wellbeing can be explained by the relationship of the personality characterizes. From the result, student's psychological wellbeing has been found to be predicted by openness personality trait coupled with more standardized impact among the big five personality characteristics.

Additionally, the result shows that the hypothesis met the assumption for regression analysis as shown in variance inflation factor (VIF) section of Table 2. In the result, the tolerance for each of the personality

characteristic is below the standard of 1.0, which shows that the assumption was met and there absence of multicollinearity as shown in the VIF. Therefore, alternative hypothesis two is partially confirmed while the null hypothesis is disconfirmed. Figure 1 shows the test for homoscedasticity which refers to whether these residuals are equally or evenly distributed.

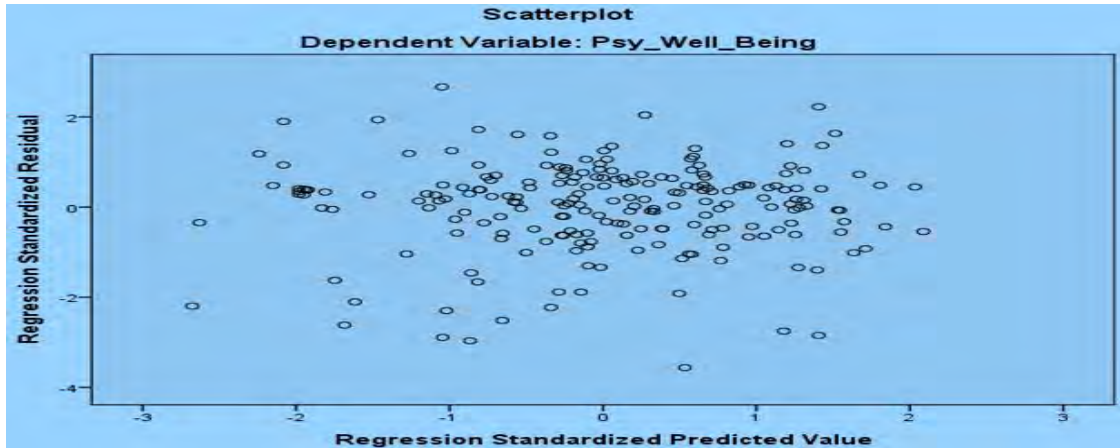


Figure 1. Scatter Plot for the test of Homoscedasticity

From Figure 1, the scatter plot shows that the sample or the data are evenly distributed. In the plot, the residuals appear clustered towards the right-upper the normal P-P plot in the output, there were some overlapped data at the middle of the diagonal line. Hence, there is some homoscedasticity among the variables of study.

Table 3 shows regression analysis for hypothesis three which stated that, conscientiousness, agreeableness, neuroticism, openness, and extraversion personality characteristics will significantly predict academic success. In the result, openness ($\beta=.211$, $t=2.971$, $p<.05$), neuroticism ($\beta=-.180$, $t=-3.297$, $p<.05$), conscientiousness ($\beta=.279$, $t=4.100$, $p<.05$), agreeableness ($\beta=.220$, $t=3.225$, $p<.05$) and extraversion ($\beta=.122$, $t=2.122$, $p<.05$) independently predict academic success. Likewise, openness, neuroticism, conscientiousness, agreeableness, and extraversion personality characteristics jointly predict academic success ($R=.624$, $R^2=.390$, $F(5, 208) = 26.58$, $p<.05$).

Table 3. Results of Multiple Regression Analysis: Prediction of Psychological Well-Being

Personality Characteristics	R	R ²	F	P	β	T	P	Tolerance	VIF
Extraversion					.122	2.12	$p<.05$	.89	1.13
Agreeableness					.220	3.22	$p<.05$	.63	1.58
Conscientiousness	.624	.390	26.58	$<.05$	.279	4.10	$p<.05$	.63	1.58
Neuroticism					-.180	-3.29	$p<.05$	.98	1.02
Openness					.211	2.97	$p<.05$	.58	1.72

Note: *n.s* denotes 'Not Significant or $p>.05$; VIF: Variance Inflation Factor

The results indicated that personality characteristics contributed .624 degree of relationship with academic

success and about 39% variability of the academic success can be explained by the relationship of the personality characteristics. Additionally, the result revealed that the big five personality characteristics significantly predict the student's academic success in their respective disciplines. Therefore, the third alternative hypothesis is confirmed however, the null hypothesis is disconfirmed. Still in the result, the hypothesis further met the conditions for regression analysis as shown in the variance inflation factor (VIF) section of the table 3.1. In the result, the tolerance for each of the personality characteristic is below the standard of 1.0, which shows that the regression assumption was met and there absence of multicollinearity as shown in the VIF. Figure 2 shows the test for homoscedasticity which refers to whether these residuals are equally or evenly distributed.

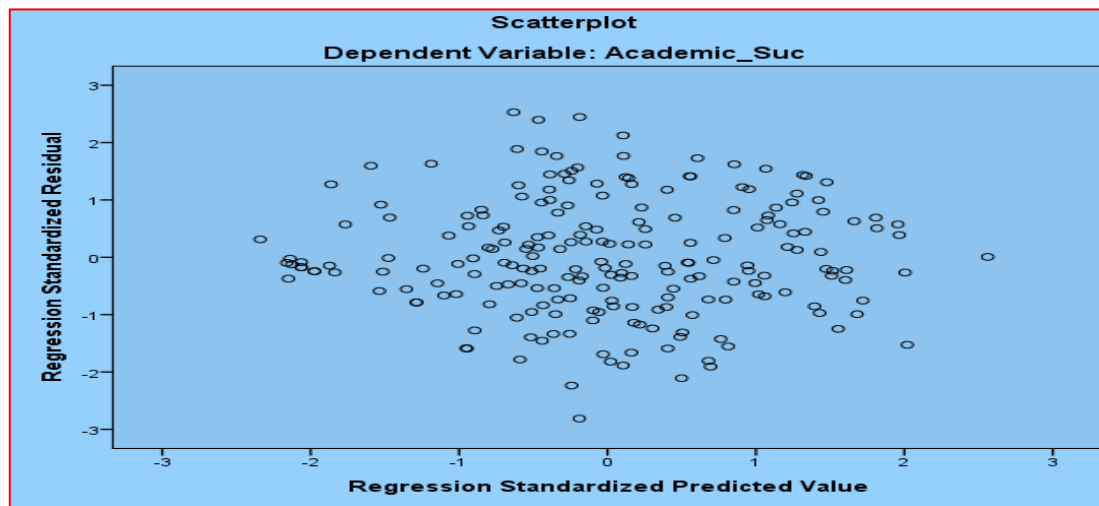


Figure 2. Scatter Plot for the test of Homoscedasticity

From Figure 2, the scatter plot shows that the sample or the data are evenly distributed. In the plot, the residuals appear towards the right below the normal P-P plot in the output, the data looks clustered toward the right and the down of the diagonal line. Hence, there is homoscedasticity.

Discussion

The study investigated personality characteristics, psychological wellbeing and academic success among Nigerian Undergraduates. The outcome showed that there were significant connections among agreeableness, conscientiousness, openness to experience and psychological well-being; while academic success significantly associated with agreeableness, conscientiousness, neuroticism and openness to experience personality characteristics. This result confirmed the findings of Anglim et al., (2020) and Steel, et al. (2008; 2019). In their studies, the authors established significant connections among selected five factor personality characteristics such as openness to experience, conscientiousness and agreeableness and psychological wellbeing. Other characteristics have other directions toward psychological wellbeing. These findings are connected with the fact that psychological wellbeing of students basically facilitated by their sociability with others, ready to learn new ideas and incorporate new innovations especially in a new academic environment.

Specifically in this study, extraversion and neuroticism had no significant independent relationship with psychological wellbeing; this partly negated findings from Reza, et al.'s (2015) study that neuroticism personality characteristic negatively related with psychological well-being. This outcome may be as a result of cultural and educational policy differences in this academic institution, most of the institutions have their unique academic programs which have abilities to impact students' personality characteristics and invariably influence their psychological wellbeing. Conversely, agreeableness, openness to experience, and conscientiousness personality characteristics significantly related with psychological well-being, this coincide with the findings of Reza, et al.,(2015) and Ullah's (2017) outcomes that openness and conscientiousness significantly have a positive relationship with psychological well-being. Students' level of academic consciousness and openness to experience associated with their psychological wellbeing

More so, this connection is not unconnected with the fact that students who are conscientious, open and agreeable tends to quickly adjust to situations, open to new experiences and have control over impulses which there after facilitate their psychological wellbeing. This outcome confirmed the opinion of Chen et al. (2013) who emphasized that, even when attending university could be very stressful for students most especially in the process of adapting and adjusting to new educational and social environments, students who rapidly adjust, conscious and open to different cultural values and norms, new mode of conversation and language dwells excellently on psychological wellbeing.

However, extraversion did not significant related with academic success; whereas, conscientiousness, openness to experience and agreeableness personality traits significantly correlated with academic success, this result buttressed findings from Lounsbury, et al. (2004) and Thoroughgood, et al., (2012). Their studies confirmed that conscientiousness and openness personality traits are mostly linked with higher institutions students' academic outcomes. While neuroticism had a significant negative association with students' academic success which reinforced the outcome of the studies of Meera et al., (2011); Ludeke, (2014) and Vedel, et al. (2015) that neuroticism negatively associated with successful academic performance of undergraduates. Students who are emotionally unstable found it difficult to excel in their academics.

In a regression model, extraversion, agreeableness, conscientiousness, neuroticism did not independently predict psychological wellbeing. Despite these factors associated with psychological wellbeing, their respective prediction could not be ascertained. However, openness to experience independently predicts psychological well-being. This finding juxtaposes the earlier relationship that was discovered between openness and psychological wellbeing. Similarly, openness, agreeableness, conscientiousness, neuroticism, and extraversion personality characteristics jointly predict psychological well-being. Per unit change in the students' Big Five Factors personality characteristics contributed to some unit of changes that occurred in their psychological well-being. This result confirmed Skomorovsky and Dursu's (2018) findings that big-five personality characteristics have been shown to significant joint prediction on student's psychological well-being. Also, the result supported the argument of Meera, et al, (2009) and Eyong, et al.,(2014) that differences in student's psychological well-being could be attributed to per unit changes that occur in individual characteristics; likewise, this result was consistent with Bello, (2016)'s research findings that traits in big-five personality domains jointly predicted

students' psychological health even though extraversion, agreeableness, conscientiousness, openness did not independently predict psychological wellbeing.

Furthermore, extraversion, agreeableness, conscientiousness, and openness independently and jointly predict academic success, this result was in line with outcome of Eyong, et al., (2014) and Meera, et al., (2009) cross sectional studies, an occurred variances in academics success of student was attributed to per unit change in individual difference. Also this result confirmed Laidra, et al., (2007); Alda, et al.,(2014); Yoke and Chooi (2015), and Poropat's (2016) that most academic success and achievement of students basically predicted by their big five personality characteristics including their conscientiousness, agreeableness, neuroticism, openness to experience, and extraversion.

Similarly, the findings supported Vedel and Poropat (2017), Bjurberg,'s (2014) outcome of studies that, specifically, conscientiousness significantly predict academic achievement among other personality characteristics. Meanwhile, neuroticism negatively predicted academic success buttressed Vikanda, et al.'s (2012) findings who stated that neuroticism negatively predict academic success but conscientiousness, openness and agreeableness were significant contributors of successful academic performance among undergraduates. Additionally, the outcome seconded the theory of self-determination personality traits and elements of human motivations suggestively predict success in life, despite student's inherent motivation to absorb, explore and master their surroundings contribute to their fundamental psychological nutrients or needs of life, their personality characteristic still play roles in their quest to have success in their academic career (Ryan & Deci, 2000; Ryan, et al., 2008; Welles, 2010).

Conclusion

The study examines personality characteristics, psychological wellbeing and academic success among Nigerian undergraduates. The study concludes from the result that extraversion and neuroticism had no significant independent relationship with psychological wellbeing, while agreeableness, openness and conscientiousness significantly positively related to psychological well-being. Additionally, extraversion significantly related to academic success; however, agreeableness, openness.

Despite the fact that, conscientiousness traits had a significant positive relationship with tertiary students' academic success, neuroticism had a significant negative association with higher institution students' academic success of undergraduates. Contrarily, extraversion, agreeableness, conscientiousness, neuroticism did not independently predict psychological wellbeing. Conversely, openness significantly and independently predicts psychological well-being. Similarly, conscientiousness, agreeableness, neuroticism, openness, and extraversion personality characteristics jointly predict psychological well-being. Furthermore, extraversion, agreeableness, openness and conscientiousness independently and jointly predict academic success. Meanwhile, neuroticism negatively predicts academic success among undergraduates.

Implications and Recommendations

The result from this study indicated that conscientiousness, agreeableness, and openness to experience had a significant positive association with psychological well-being of students. In addition, conscientiousness, agreeableness, and openness to experience traits of these tertiary students had a significant positive link with students' academic success. In the meantime, neuroticism negatively connects with students' academic success. These results therefore have implications on the need for continuous improvement in approach to academics and psychological wellbeing of students in higher institution through personality assessment and evaluation of students. Also, academic instructors, school counselors, school mentors and concerned individuals needed to be properly orientated as to the significance of personality characteristics being the predictors and determinants of academic success and psychological wellbeing of students, in order to guide them in planning the curriculum such as the design of course assignments and testing methods based on individual differences of the students. The result from the regression model showed that big five personality characteristics significantly served as the predictor for psychological wellbeing and academic success, the study therefore recommended those educational programs that promote novel ideas and unconventional values in students should be reinforced in higher institutions. For instance, talent hunt programs that can stimulate the academic environment can further assist in improving the psychological well-being and academic success of the students.

The study was limited based on the adoption of a convenient sampling method and being a quantitative study. Also, the student's grade point average was not included in the participant's demographic information, which could have seemed relevant to academic success. The study therefore suggest that further research study should look beyond private university settings and look into other academic settings such as information technology, research institutes and private organizations and possibly adopt other sampling methods.

References

- Adeyemi, A.(2016). Psycho-social predictors of academic underachievement among senior secondary schools students in Ibadan north local government area of Oyo state. *Counseling and Behavioural Studies Journal*, 6(2). 33-56
- Agbakwuru, C. (2000). Teacher Personality traits and Characteristics and learning Effectiveness of *Pupils Psychological Perspective*, 2, 22-28.
- Anglim, J., & Grant, S. (2016). Predicting Psychological and Subjective Well-Being from Personality: Incremental Prediction from 30 Facets Over the Big 5. *Journal of Happiness Studies*, 17, 59-80.
- Anglim, J., Horwood, S., Smillie, L. D., Marrero, R. J., & Wood, J. K. (2020). Predicting Psychological and Subjective Well-Being from Personality: A Meta-Analysis. *Psychological Bulletin*.
- Alda, T., Maria, L. D., & Alida, L. (2014). Personality traits, self-esteem and academic achievement in secondary school students in Campania, Italy. *Universal Journal of Educational Research*, 2(7), 512-520.
- Antes, A. L., Brown, R. P., Murphy, S. T., Waples, E. P., Mumford M. D., Connelly, S., & Devenport, L. D. (2007). Personality and ethical decision-making in research: the role of perceptions of self and others.

- Journal of Empirical Research on Human Research Ethics: An International Journal*, 2(4), 15-34.
<http://dx.doi.org/10.1525/jer.2007.2.4.15>
- Bello, I.F. (2016). Personality traits as predictors of psychological health among secondary school adolescents in Ede, Osun State. A research project submitted to the department of behavioral studies, college of management and social sciences, Redeemer's University, Ede, Osun State, Nigeria in partial fulfillment of the requirements for the award of post graduate diploma in psychology.
- Bjurberg, H. (2014). Academic achievement and personality traits: An empirical and neurobiological investigation. A Project Submitted to the University of Skövde as a final year project towards the degree of B.Sc. in the School of Bioscience. The project has been supervised by Kristoffer Ekman.
- Block J. (2010). The five-factor framing of personality and beyond: some rumination. *Psychology Inquiry*, 21, 2–25.
- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595-616. <http://dx.doi.org/10.1016/j.leaqua.2006.10.004>
- Chen, J., Wu, Y., Yi, H., Li, Z., Eshita, Y., Qin, P., Chen, L., & Sun, J. (2013). The impact of academic stress on medical students attending college in the Inner Mongolia Area of China. *Open Journal of Preventive Medicine*, 3(2), 149-154.
- Compass, B. E. (2004). Processes of Risk and Resilience During Adolescence: Linking Contacts and Individuals in R. Lerner & L. Steinberg (Eds), *Handbook of Adolescent Psychology*. New York: Wiley.
- Costa, P. T., & McCrae R. R. (1992). *Revised NEO personality inventory (NEO-PI-R) and NEO five factor inventory (NEO-FFI) professional manual*. Psychological Assessment Resources: Odessa, FL.
- Costa, P.T. & McCrae, R.R. (1980). Influence of extraversion and neuroticism on subjective well-being: Happy and unhappy people. *Journal of Personality and Social Psychology*, 38, 668-678.
- Deci, E.L. and Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95, 542-575.
- Eyon, E. I., David. B. E. & Umoh. A. J. (2014). The Influence of Personality Trait on the Academic Performance of Secondary School Students in Cross River State, Nigeria. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 19(3), 12-19.
- Festa-Dreher, D. V. (2012). *The Academic Success Inventory for College Students: An Item Response Theory Analysis*. A Dissertation for fulfillment of the requirements for the degree of Doctor of Philosophy, Department of Educational Psychology and Learning Systems, The Florida State University.
- Jaja, J. M. (2013). Higher education in Nigeria: Its gain, its burden. *Global Journal of Human Social Science, Linguistics and Education*, 13(14), 20-29.
- John, O. P., & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research*, 2, 102–138. New York: Guilford Press.
- Kalshoven, K., Den Hartog, D. N., & De Hoogh, A. H. (2011). Ethical leader behavior and big five factors of personality. *Journal of Business Ethics*, 100(2), 349-66.
- Keyes, C. L. (2006). Mental health in adolescence: Is America's youth flourishing? *American Journal of Orthopsychiatry*, 76(3), 395-402.

- Laidra, K., Pullmann, H. & Allik, J. (2007). Personality and intelligence as predictors of academic achievement, personality and individual differences. *Personality and individual differences*, 42(3), 441-451.
- Lawal, T. (2016). *Influence of self-esteem, personality characteristics on psychological well-being, and academic success among Undergraduates in Ibadan*. A project submitted to the department of Psychology, Lead City University, Ibadan, Oyo State, Nigeria, for the fulfillment of BSc. In Psychology. Unpublished
- Lounsbury, J. W., Steel, R. P., Loveland, J. M., & Gibson, L. W. (2004). An investigation of personality traits in relation to adolescent school absenteeism. *Journal of Youth and Adolescence*, 33(5), 457-466.
- Ludeke, S. G. (2014). Truth and fiction in the association between openness and education: The role of biased responding. *Learning and Individual Differences*, 35, 137-141. doi: 10.1016/j.lindif.2014.07.008
- Meera, K., Steven, J. K., Ronald, R. S., & Alen, A. (2011). The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, 51, 472– 477.
- Meléndez, J. C., Satorres, E., Cujíño, M., & Reyes, M. (2019). Big Five and psychological and subjective well-being in Colombian older adults. *Archives of Gerontology and Geriatrics*, 82, 88-93.
- Nwosu, K. C., Unachukwu, G. C., Achukwu, C. B., & Uzochina, G. O. (2017). *Teacher education in Nigeria: A misfit in the digital age?* Paper presented at The European Proceedings of Social & Behavioural Sciences. Retrieved from <http://dx.doi.org/10.15405/epsbs.2017.05.02.40>
- Nwosu, C. K., Okoye, C. C & Onah, U. H. (2018). An Interpretive Descriptive Study of Factors Affecting Academic Achievement of Underachieving Student Teachers in Nigeria. *The Journal of at-risk issues*. 21(2), 20-29.
- O'Connor, M. C & Paunonen. S. V. (2007). Big Five personality predictors of post-secondary academic performance, *Personality and Individual Differences*, 43(5), 971-990. doi: 10.1016/j.paid.2007.03.017
- Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, 135(2), 322-338. doi:10.1037/a0014996
- Poropat, A. E. (2014). A meta-analysis of adult-rated child personality and academic performance in primary education. *British Journal of Educational Psychology*, 84(2), 239-252. doi: 10.1111/bjep.12019
- Poropat, A. E. (2016). Beyond the shadow: The role of personality and temperament in learning. In L. Corno, & E. Anderman (Eds.), *Handbook of Educational Psychology* (pp.172-185). Washington D.C.: American Psychological Association, Division 15 – Educational Psychology.
- Poropat, A. E., & Corr, P. J. (2015). Thinking bigger: The Cronbachian paradigm & personality theory integration. *Journal of Research in Personality*, 56(1), 59-69. doi: 10.1016/j.jrp.2014.10.006
- Reza, M., Mobarakeh, V., Juhari, R., Yaacob, S., Redzuan, M., Mobarakeh, S. (2015). The Effects of Personality Traits and Psychological Well-Being among Iranian Adolescent Migrants in Kuala-Lumpur, Malaysia. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 20(7), 25-28.
- Rohde, T.E. & Thompson. L.A. (2007). Predicting academic achievement with cognitive ability. *Intelligence*, 35(1), 83-92. doi: 10.1016/j.intell.2006.05.004
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation social development, and well-being. *American Psychologist*, 55(1), 68-78. doi: 10.1037/0003-066X.55.1.68
- Ryan, R. M., Huta, V., & Deci, E. L. (2008). Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9, 139–170.

- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning psychological well-being. *Journal of Personality and Social Psychology*, *57*, 1069–1081.
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, *69*, 719–727.
- Saint, W., Hartnette, T. A., & Strassner, E. (2003). Higher education in Nigeria: A status report. *Higher Education Policy*, *16*(3), 259-281. doi: 10.1057/palgrave.hep.8300021.\
- Shabbir, J. & Rukhsana, H, (2011). Do black children benefit more from small classes? Multivariate instrumental variable estimators with ignorable missing data. *Journal of Educational and Behavioral Statistics*, *37*(4), 543-574.
- Skomorovsky, A & Dursun, S. (2018). Personality and Psychological Well-Being of Canadian Forces Officer Candidates: *The Role of Coping*. RTO-MP-HFM-205. 1-24. Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std Z39-18
- Skomorovsky, A. (2009a). The 75-Item Trait-Self Description Personality Inventory (TSD-PI): Examining Convergent and Predictive Validity in a Sample of Privates. DRDC CORA TM 2008-036. Ottawa, Canada: *Defence Research & Development Canada – CORA*
- Skomorovsky, A. (2009b). Structured Interview Questionnaire: Examining Convergent and Predictive Validity in a Sample of Privates. DGMPPRA TM 2009-004. Director General Military Personnel Research and Analysis, Ottawa, Ontario, Canada.
- Steel, P., Schmidt, J., Bosco, F., & Uggerslev, K. (2019). The effects of personality on job satisfaction and life satisfaction: A meta-analytic investigation accounting for bandwidth–fidelity and commensurability. *Human Relations*, *72*, 217-247.
- Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, *134*, 138-161.
- Sun, J., Kaufman, S. B., & Smillie, L. D. (2018). Unique Associations Between Big Five Personality Aspects and Multiple Dimensions of Well-Being. *Journal of Personality*, *86*, 158-172.
- Thoroughgood, C. N., Padilla, A., Hunter, S. T., & Tate, B. W. (2012). The susceptible circle: A taxonomy of followers associated with destructive leadership. *Leadership Quarterly*, *23*(5), 897-917. <http://dx.doi.org/10.1016/j.leaqua.2012.05.007>
- Troncione, A., Drammis, M.L & Labella, A. (2014). Personality Traits, Self-Esteem and Academic Achievement in Secondary School Students in Campania, Italy. *Universal Journal of Educational Research* *2*(7), 512-520. <http://www.hrpub.org> DOI: 10.13189/ujer.2014.020703
- Ullah, F. (2017). Personality Factors as Determinants of Psychological Well-Being among University Students. *The International Journal of Indian Psychology*. *4*, 5-16.
- Vedel, A., Thomsen, D. K., & Larsen, L. (2015). Personality, academic majors and performance: Revealing complex patterns. *Personality and Individual Differences*, *85*, 69-76. doi: 10.1016/j.paid.2015.04.030
- Vikanda, P., Nuchada, D., Pair S., Suppasit, S., Surej, P. J., Tipa, S., ... Smith, J. (2012). An analysis of personality traits and learning styles as predictors of academic performance. *ABAC Journal*, *32*(3), 1-19.
- von Stumm, S., & Ackerman, P. L. (2013). Investment and intellect: A review and meta-analysis. *Psychological Bulletin*, *139*(4), 841-869. doi: 10.1037/a0030746
- Welles, T. L. (2010). *An Analysis of the Academic Success Inventory for College Students: Construct Validity*


and Factor Scale Invariance. A Dissertation submitted to the Department of Educational Psychology and Learning Systems in partial fulfillment of the requirements for the degree of Doctor of Philosophy. The Graduate School, Electronic Theses, Treatises and Dissertations.

West African Examination Council (2011). *Student Examination Report for four consecutive years*. Available at <http://www.waec.org/report>

Yoke, T. C., & Chooi, S. L. (2015). Personality traits, emotional intelligence and academic achievements of university students. *American Journal of Applied Psychology*, 4(3), 39-44.

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