

## Personality Types As Determinants Of Depression And Suicidal Ideation Among Undergraduates In A Faith-Based Institution In Ogun State, Nigeria

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### ABSTRACT

Depression and suicidal ideation represent pressing mental health challenges among undergraduate students worldwide. These issues can have far-reaching consequences, including adverse academic performance, impaired social functioning, and an increased risk of self-harm or suicide. Therefore, this study investigated the relationship between personality types, depression and suicidal ideation among the undergraduates.

A cross-sectional survey research design was adopted while 371 respondents participated in this study. Data were collected using three standardized instrument: NEO-Five-Factor Inventory; Beck Depression Inventory, and Scale for Suicide Ideation. Analysis was done using descriptive statistics and Multiple Regression Analysis.

The results revealed the prevalence of depression at 45.4% and suicidal ideation 39.1% among the undergraduates. Personality types influenced depression and suicidal ideation among undergraduates. However, conscientiousness ( $\beta = 0.132$ ,  $t = 2.055$ ,  $p = 0.028$ ) and neuroticism ( $\beta = .301$ ,  $t = -4.873$ ,  $p = .007$ ) were found to relatively influenced depression while only neuroticism ( $\beta = .287$ ,  $t = 3.104$ ,  $p = .000$ ) was found to individually influence suicidal ideation among the undergraduates.

The study concluded that depression and suicidal ideation exists among the undergraduates, as there are significant indication of personality factors as predictors for the prevalence of depression and suicidal ideation among the undergraduates. The study however, recommended that the university environment should be strengthened, empowered in a significant way and be made to deal with mental health related factors effectively among the students.

## Introduction

Mental health is an essential aspect of overall well-being, encompassing emotional, psychological, and social aspects of an individual's life. World Health Organization (WHO) considers mental health as the basis of the overall health of the population. Mental health is the state of well-being in which an individual can realize their potential, cope with the normal stressors of life, work productively, and contribute to their community. A positive mental health state contributes to a fulfilling life and healthy functioning and also influences how to handle stress, relate to others, and make choices.

Depression and suicidal ideation among undergraduates are significant public health concerns worldwide. These issues can have profound consequences on students' well-being, academic performance, and overall quality of life. Understanding the role of personality types in the development and manifestation of depression and suicidal ideation is crucial for effective prevention and intervention efforts. According to the World Health Organization (WHO, 2019), depression is a common mental illness that manifests as low self-esteem or guilt, diminished energy, loss of interest or pleasure, interrupted sleep or eating, and difficulty concentrating. Depression in adolescents is typically under diagnosed by healthcare practitioners and goes unnoticed by families and society. Adolescent depression is particularly difficult to assess due to the hormonal and psychological changes that are typically connected to this stage of life (Khasakhala et al., 2012).

The attitude of the adolescent, who might not be aware of the problem or seek help with it, may make it difficult to diagnose depression in adolescents (Chinawa et al., 2015; Oke et al., 2025). Additionally, the desire to seek therapy is hampered by the poor perception of parents and other significant others who focus mostly on external behavioral abnormalities rather than the adolescent's depressed emotions. The rapid hormonal changes that occur during this time may also make assessing depression in adolescents difficult (Asekomhe & Ayodele, 2024).

Adolescent depression may be quite upsetting and can have a significant impact on developing people as they enter adulthood. High expectations and social pressures can cause significant stress and sadness in adolescents. In their study, Oke et al. (2025) found that 69 out of 302 teenagers experienced depression, with a frequency of 26.2%. Teenage girls were far more likely than boys to experience depression, and early adolescence was markedly more affected than middle and late adolescence. Among college students, depression is a common mental health condition that is typified by hopelessness. Academic pressure, interpersonal connections, and adult transitions are among the stressors that are frequently present in the university setting. Zivin, Eisenberg, Gollust, and Golberstein (2015) discovered that depression symptoms affected 17% of college students. Suicidal thoughts are frequently associated with depression. The majority of suicides and attempted suicides have really been attributed to depression. In other words, one of the main risk factors for suicide thoughts is depression.

Over the years, psychologists, theologians, doctors, sociologists, counselors, and artists have all been interested in the complicated issue of suicide. Suicide claims the lives of around one million people annually, with low and middle-income nations accounting for the majority of these deaths (World Health Organization, 2018). There is a massive loss of young people to societies around the world, which does not take into account the ripple effect suicide has on the lives of many families, friends, colleagues, and communities. Early detection of suicide risk is crucial but remains a challenge in suicide prevention. As a serious public health problem it demands our attention, but its prevention and control, unfortunately, are no easy task.

Suicidal ideations are typically demonstrated by suicidal thoughts and behaviours which can emanate from and are strongly influenced by several factors including personality and mental health issues such as anxiety and depression. Suicidal ideation, a risk factor for suicide, is a concern. In a study by Mortier (2018), approximately 11.1% of university students reported having suicidal thoughts. Thus, depression and suicidal ideation among undergraduates pose significant challenges to their well-being and academic success. In Nigeria, available evidence shows that suicide is prevalent among young people. Nigeria has an estimated suicide prevalence of 17.3 per 100,000 in 2016 (WHO, 2019). The estimated suicide prevalence for Nigeria is higher than the global and African prevalence estimates of 10.5 per 100,000 and 12.0 per 100,000, respectively. The WHO further reported that in Nigeria, the age-standardized suicide rate for both sexes in 2016 was 17.3 per 100,000, with the rate being 17.5 per 100,000 in males and 17.1 per 100,000 in females (WHO, 2021).

In a study Iweama et al. (2024), the prevalence of suicidal behavior was 34.9% while a female sex, depression, hopelessness, and perceived burdensomeness were found to be associated with suicidal ideation. In addition, Oladeji et al. (2021) reported that the 12-month prevalence of suicide ideation and attempts among adolescents was between 6.1% and 22.9%, 3.0%, and 12.5%. In contrast, the lifetime rates of suicidal ideation, plan, and attempt were 3.2%, 1.0%, and 0.7%, respectively, for the adult population in Nigeria.

However, personality types play a crucial role in the development and manifestation of these mental health issues. Thus, personality refers to a collection of emotional, thought and behavioural patterns that are unique to each individual and relatively stable over time. Psychologists define personality as a dynamic concept describing the growth and development of a person's whole psychological system. Other than looking at part of the person, personality looks at some aggregate whole that is greater than the sum of the parts (Robbins, 2015). Personality is a combination of thoughts, emotions and motivation of individuals. It has a long-lasting feature which is not easily affected by the external interferences. One of the foremost researchers in the structure of personality was Raymond Cattell who conceptualized personality as being made up of sixteen distinct personality types (Cattell, 1955). All of these theories are based loosely on Gordon Allport's type theory of personality which identified 171 personality types (Allport, 1937). Types have been described as generalized personality dispositions that account for regularities in the functioning of a person across situations and over time.

One of the most widely accepted and a comprehensive theory of personality is the McCrae and Costa's (1999) NEO-Five personality factors. The NEO-Five personality factors are a type-based theory of personality which is based on five dimensions and is popularly known as the Big Five: Extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience. These types are considered to represent the fundamental dimensions of personality (Eagle, 2018; Soto, 2018). Each of these dimensions of personality encompasses a wide range of types. Extraversion refers to a state where individuals show more concern towards what is happening outside. It is the opposite of introversion which refers to a state when an individual is concerned only with his/her own life and nothing else. Agreeableness is a personality type which teaches the individual to be adjusted in almost all situations. Conscientiousness requires the individual to be sensitive to his/her conscience. Conscientious people tend to be trustworthy, self-disciplined and achievement oriented. Neuroticism refers to one's tendency to experience negative thoughts and feelings such as anxiety, hostility, impulsivity, depression and low self-esteem. Openness to experience is a type that makes individuals to seek new knowledge, skills and experiences. People who score high on openness are quite broadminded and modern in their outlook as compared to individuals who score low on the same parameter. Such individuals are conservative, reluctant to changes and have a traditional approach in life (Matthews, Deary, & Whiteman, 2018).

These types have been associated with various mental health outcomes such as depression and suicidal ideation. For example, people with high neuroticism may be more vulnerable to stressors, making them prone to depressive symptoms (Kotov, 2021); high levels of conscientiousness are associated with self-discipline, organization and goal-oriented behaviour (Malouff, Thorsteinsson, & Schutte, 2015); low extraversion has been linked to depression (Kotov, 2021); and agreeable individuals may have stronger social support networks, potentially reducing their risk of depression (Lahey, 2019).

Babcock University, a private Christian institution in Nigeria, provides a unique context for studying the relationship between personality and mental health outcomes such as depression and suicidal ideation. The cultural and religious background of students at Babcock may interact with personality types to influence depression and suicidal ideation. Understanding the interaction between personality and depression/suicidal ideation at Babcock University is essential for developing targeted interventions and support systems to promote the mental health of its students. Conducting research on this topic at the institution can contribute valuable insights that address the specific needs of Babcock University's student population. Hence, this study will be conducted to examine the function of personality in depression and suicidal ideation among undergraduates at Babcock University.

### **Research Questions**

The following research questions are generated to guide this study:

- (i) What is the extent of the prevalence of depression among undergraduates at Babcock University?

- (ii) What is the extent of the prevalence of suicidal ideation among undergraduates at Babcock University?
- (iii) How do personality types influence depression among undergraduates at Babcock University?
- (iv) How do personality types influence suicidal ideation among undergraduates at Babcock University?
- (v) What are the bivariate relationships between personality types, depression and suicidal ideation among undergraduates at Babcock University?

### Hypotheses

The following null hypotheses were formulated and addressed in this study:

- Ho1: There will be no significant influence of personality types on depression among undergraduates at Babcock University.
- Ho2: There will be no significant influence of personality types on suicidal ideation among undergraduates at Babcock University.
- Ho3: There are no significant bivariate relationships between personality types, depression and suicidal ideation among undergraduates at Babcock University.

### METHODOLOGY

**Research Design:** This study will adopt the descriptive survey research design of the ex post facto type which will enable the researcher to collect data from a cross-section of the target population.

**Population:** The study population cuts across all university students except graduate and postgraduate students in Babcock University. The characteristic of the study population was mixed at every School (faculty) irrespective of course of study (Science and Non-science), gender (male and female), age, socio-economic background, ethnicity, and class level.

**Sample Size and sampling Technique:** An estimated sample size was calculated adopting the proportion formula in Population Survey Sampling by Leslie, (1965) and prevalence of mental health issues among young adults of 0.406 found in a study carried out in South-West, Nigeria by Ogunsanwo and Ayodele (2019). Therefore, sample of 371 undergraduates were selected for the study. The 371 represented the number of respondents across the university to which copies of the questionnaire were administered.

**Research instrument:** The following two instruments will be used for data collection in this study: Demographic Data Inventory (DDI) with four items was used to collect data of demographic features of the respondent. Section B contained NEO-Five-Factor Inventory (NEO-FFI). The NEO-Five-Factor Inventory (NEO-FFI) was developed by Costa and McCrae (1989) for use among adolescents. The NEO-FFI is a 60-item Likert-type measure of the five major personality domains which make up the sub-scales (neuroticism, extraversion, openness, agreeableness, and conscientiousness) theorized in the NEO-Five personality factors ranging from 1 = strongly disagree to 5 = strongly agree. Higher scores on all items indicate higher levels of the corresponding personality types. Section C contained Beck Depression Inventory — R (BDI-R). The inventory contains 18 self-report items which individuals complete using a four-point scale with responses ranging from 1 = 1 = Not at all to 4 = Always. Section D contains Scale for Suicide Ideation (SSI). It is a three-point multiple choice-like instrument containing 19 items and having responses ranging from 1 to 3. Each item consists of three options graded in intensity from 1 to 3.

**Method of Data Collection:** The researcher will first obtain a letter of introduction from the Department of Education, College of Education and Humanities, Babcock University, Ilishan-Remo and tender this letter on visits to the Dean in each of the Schools and seek his/her consent. Thereafter, the researcher will meet the students in their lecture halls and inform them about the purpose of the research and associated benefits. The students will be informed of their freedom to participate or not to participate in the exercise, and those who decide to take part will be encouraged to give frank and honest responses to the questionnaire items with the assurance that information disclosed by them will be treated as confidential. The instruments will then be administered. To guarantee the integrity of data

collected, the researcher will give necessary additional explanations where such are required. Thereafter, the researcher will collect the completed questionnaires immediately and thank the respondents for their cooperation and participation in the study.

**Method of Data Analysis:** The demographic data of participants will be analyzed by means of descriptive statistical techniques of frequency distribution, percentages, and charts. The research questions will be analyzed using mean and standard deviation. The first and second hypotheses will be tested by means of simple linear regression analysis, while the third hypothesis will be analyzed using the Pearson's product-moment correlation coefficients. All tests will be carried out at the .05 level of significance, and all analyses will be executed by means of the Statistical Packages for the Social Sciences (SPSS) Version 23 software.

## Results

**Table 1: Respondents' Demographical Data**

SN	Variable (N = 371)		Frequency	Percent (%)
1	Age	14-16 yrs	71	19.1
		17-19 yrs	244	65.8
		20-25 yrs	56	15.1
2	Religion	Christianity	340	91.6
		Islam	31	8.4
3	Gender	Male	166	44.7
		Female	205	55.3
4	Ethnicity	Yoruba	193	52.0
		Igbo	112	30.2
		Hausa	66	17.8
5	Level	200	97	26.1
		300	100	27.0
		400	106	28.6
		500	68	18.3

Results presented in Table 1 revealed that majority (244; 65.8%) of the respondents were within the age of 17-19 years. Three hundred and forty (91.6%) of the respondents were Christians. The gender of the respondents shows that 205 (55.3%) were females and 166 (44.7%) were males. Based on the ethnicity, majority were Yoruba (193, 52.0%). The reason for the high population observed among the Yoruba is because the study area is situated in Yoruba land.

**Table 2: Prevalence of depression among undergraduates**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Depression	371	26.00	72.00	32.69	13.87

Table 2 reveals the prevalence of depression among undergraduates at Babcock University. It was observed from the table that the undergraduates had a depression mean score of 32.69 (45.4%), which is moderate.

**Table 3: Prevalence of suicidal ideation among undergraduates**

Variable	N	Minimum	Maximum	Mean	Std. Deviation
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Suicidal ideation	371	13.00	57.00	22.3	8.33
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Tables 3 reveal the prevalence of suicidal ideation among undergraduates at Babcock University. It was observed from the table that the undergraduates had a suicidal ideation mean score of 22.3 (39.1%), which is moderate.

**Table 4: Summary of Multiple Regression Analysis of influence of personality types on depression among undergraduates at Babcock University**

Model	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error	Beta		
(Constant)	77.071	4.469		7.422	.000
Openness	.043	.080	.037	.656	.890
Extraversion	-.056	.063	-.029	-.391	.656
Agreeableness	-.121	.077	-.081	-1.209	.193
Conscientiousness	.186	.107	.132	2.055	.028
Neuroticism	.421	.179	.301	4.873	.007
<b>Source of variation</b>	<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F-Ratio</b>	<b>P</b>
Regression	239.000	5	47.800	13.855	.000
Residual	1259.250	365	3.450		
Total	1498.250	370			
<b>R = 0.417; Multiple R (Adjusted) = 0.174</b>					
<b>Multiple R<sup>2</sup> (Adjusted) = 0.171; Stand error estimate = 3.296</b>					

The relative contribution of each predictor variable (Openness, Extraversion, Agreeableness, Conscientiousness, and Neuroticism) to the variance observed in the undergraduates' depression. The results showed that openness ( $\beta = 0.037$ ,  $t = .656$ ,  $p = .890$ ), extraversion ( $\beta = -0.029$ ,  $t = -.391$ ,  $p = .656$ ), and agreeableness ( $\beta = -.081$ ,  $t = -1.209$ ,  $p = 0.193$ ) failed to significantly influence depression among undergraduates at Babcock University. However, conscientiousness ( $\beta = 0.132$ ,  $t = 2.055$ ,  $p = 0.028$ ) and neuroticism ( $\beta = .301$ ,  $t = -4.873$ ,  $p = .007$ ) were found to relatively influence depression among undergraduates at Babcock University.

However, when all the personality types put together, they yielded a coefficient of multiple regression (R) of 0.417 and adjusted multiple regression square of 0.171. This shows that 17.1% of the total variance in the depression among undergraduates at Babcock University is accounted for by personality factors (Openness, Extraversion, Agreeableness, Conscientiousness, and Neuroticism). The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value at 13.855 significant level ( $F_{(5,365)} = 13.855$ ;  $P = .000$ ). Thus, the null hypothesis was rejected as personality types influenced depression among undergraduates at Babcock University.

**Table 5: Summary of Multiple Regression Analysis of influence of personality types on suicidal ideation among undergraduates at Babcock University**

Model	Unstandardized Coefficients		Standardized Coefficients	T	p-value
	B	Std. Error	Beta		
(Constant)	69.614	2.337		20.249	.000
Openness	-.049	.101	-.034	-1.033	.146
Extraversion	-.110	.127	-.050	-.871	.385
Agreeableness	-.171	.129	-.079	-1.344	.190
Conscientiousness	.040	.117	.027	.380	.711

Neuroticism	.322	.105	.287	3.104	.000
Source of variation	Sum of Squares	Df	Mean Square	F-Ratio	P
Regression	152.400	5	30.480	7.391	.000 <sup>b</sup>
Residual	1505.260	365	4.124		
Total	1657.660	370			
<b>R = 0.211; Multiple R (Adjusted) = 0.045</b>					
<b>Multiple R<sup>2</sup> (Adjusted) = 0.045; Stand error estimate = 5.003</b>					

The relative contribution of each predictor variable (Openness, Extraversion, Agreeableness, Conscientiousness, and Neuroticism) to the variance observed in the undergraduates' suicidal ideation. The results showed that openness ( $\beta = -0.034$ ,  $t = 1.033$ ,  $p = .146$ ), extraversion ( $\beta = -0.050$ ,  $t = -.871$ ,  $p = .385$ ), agreeableness ( $\beta = -.079$ ,  $t = -1.344$ ,  $p = 0.190$ ), and conscientiousness ( $\beta = 0.027$ ,  $t = 0.380$ ,  $p = .711$ ) failed to significantly influence suicidal ideation among undergraduates at Babcock University. However, only neuroticism ( $\beta = .287$ ,  $t = 3.104$ ,  $p = .000$ ) was found to individually influence suicidal ideation among undergraduates at Babcock University.

However, when all the personality types put together, they yielded a coefficient of multiple regression (R) of 0.211 and adjusted multiple regression square of 0.045. This shows that 4.5% of the total variance in the suicidal ideation among undergraduates at Babcock University is accounted for by personality factors (Openness, Extraversion, Agreeableness, Conscientiousness, and Neuroticism). The table also indicated that the analysis of variance of the multiple regression data produced an F-ratio value at 7.391 significant level ( $F_{(5,365)} = 7.391$ ;  $P = .000$ ). Thus, the null hypothesis was rejected as personality types influenced suicidal ideation among undergraduates at Babcock University.

## Discussion

The outcome of this study revealed moderate prevalence of depression and suicidal ideation among the undergraduates. This implies that every adolescent has the potential to be depressed and/or at one time or the other nurse an idea of committing suicide genuinely or in genuinely. This result is in tandem with the previous findings of Ayodele and Sotonade (2020) that continuous emotional fluctuations in adolescents is an indicator of mental health issues such as anxiety, depression and suicidal ideation. Anxiety and depression impact 25% to 30% of adolescents and young adults worldwide and are among the top causes of disability (GBD 2019 Mental Disorders Collaborators, 2019; Silva et al., 2020). Adolescence and early adulthood are common times for mental health issues to surface (Solmi et al., 2022).

Personality type was found to influence the depression among undergraduates. This implies that personality traits can significantly influence the development and manifestation of depression among young adults. Specifically, the results of this study showed that conscientiousness and neuroticism were found to relatively influence depression among undergraduates. These traits were found to be associated with an increased risk of depressive symptoms. They can affect how adolescents experience and react to stress, cope with challenges, and form social connections, all of which play a role in mental health. This result is in tandem with the findings of Bolakale-Rufai (2022) that personality traits, particularly high neuroticism and low self-esteem, have been identified as risk factors for depression among medical students.

Personality type was found to influence the undergraduates' suicidal ideation. Specifically, the results showed that only neuroticism was found to individually influence suicidal ideation among undergraduates.

## Conclusion

This study evaluated the relationship between personality types and mental health outcomes, namely, depression and suicidal ideation, among the undergraduate population at Babcock University. In addition, descriptive statistics provided insight into the prevalence of the independent variables. This finding concluded that personality factors significantly predict the prevalence of depression and suicidal ideation among the undergraduates.

## Recommendations

The environment plays an important role in the formation of personality and mental health issues. There are different types of environments, social, natural, built and virtual, each of which has different effects on human behavior, but few studies about the effects of different types of environment on mental health are available. The social environment, comprising the interactions, networks and social support, for example, social crisis, economic, social mobilization and public policy, can be stressors in which adolescent are involved.

Similarly, the virtual environment, such as using the Internet or any other media, where ideal bodies are broadcasting or offering beautiful bodies, can also be stressors. The fact is that adolescence is a vulnerable period in development because of physical, biochemical and social changes that are experienced during this time in spite of the differences in culture, gender, socioeconomic status and education level that lead to coping with external demands and stress.

The aforementioned show the importance of identity anxiety and depressive symptoms in this particular population of students, to improve the mental health and personality in secondary school and university students.

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