



GENDER AND PERSONALITY AS PREDICTORS OF ANXIETY AMONG UNDERGRADUATES IN ENUGU URBAN

¹Sandra O. Ezeh, ²Mgbenkemdi Ejike H. & Aboh J. Ogbole¹

¹Department of Behavioral Medicine, Nigerian Army Reference Hospitals, Kaduna

²Department of Psychology, Enugu State University of Science and Technology, Enugu

ABSTRACT

Anxiety has been considered the most prevalent manifestation of psychological distress, a common cause of poor academic performance among students. The study aimed to assess gender and personality as predictors of anxiety among undergraduates in Enugu urban. A total of 504 undergraduate students, 182 males and 322 females aged 17-30 years ($M = 23.51$, $SD = 3.34$) across 4 institutions in Enugu participated in the study. Two instruments were used: the Big Five Inventory (BFI) (Omoluabi, 2002). The BFI was originally designed by John, Donahue and Kentle, (1991) and Anxiety Scale for Undergraduate Students (ASUS) by Singhal (2015). Data was collected using the Big Five inventory and the Anxiety Scale for Undergraduate Students. Results obtained revealed that gender did not predict anxiety among undergraduate students in Enugu urban, while personality traits neuroticism, conscientiousness and openness were found to significantly predict student's anxiety. This study, therefore, provides further evidence of the role of gender and personality in predicting anxiety among undergraduate students in Enugu urban, which must be explored in depth as a target of preventive interventions in the area of students' mental health.

Key words: Anxiety, Gender, Personality, Undergraduate students

INTRODUCTION

During education, university students encounter a great deal of academic, personal and social stress though some level of stress is essential to motivate individuals to achieve their goals (Ranthnayake & Ekanayaka, 2016). Psychological distress has been reported to be common among university students in many regions of the world and impacts on quality of life and academic performance, and social life (James, Munyaradzi, Shalote & Sudanda, 2018; Kamberi, Hoxha, Shala, Shahini & Vehapi, 2019; Aluh, Abba & Afosi, 2020). Anxiety disorders are considered the most prevalent manifestation of psychological distress with a lifetime prevalence of 5.7% and 12 months prevalence of 4.1% in Nigerian students (Gureje, Lasebikan, Kola, & Makanjuola, 2006) with other recent studies showing a higher prevalence along with depression and stress, (Reddy, Karishmarajanmenon and Anjanathattil, 2018; Mirón, Goldberg, López-solà, Nadal, Armario, Andero, Giraldo, Ortiz, Cardoner, & Palao, 2019).

While anxiety can be defined as A future-oriented and global response, involving both cognitive and emotional components, in which an individual is inordinately apprehensive, tense, and uneasy about the prospect of something terrible happening anxiety disorders are characterized by excessive fear and anxiety, and related disturbances in behaviour, (Whitebourne, 2017), anxiety can also be described as a condition of state and trait, in which the first is understood as a transitional emotional state, characterized by feelings of tension that vary in intensity over time; and the second refers to personal disposition, moderately stable, to react to situations perceived as threatening, (lunes, Moura, Carvalho, Nogueira, Silva, Souza, Miranda, de Carvalho, Chaves, 2017). Afolayan, Donald, Onasoga, Babafemiand Agama (2013) opined anxiety to be a common cause of poor academic performance among students in every part of the globe. While this manifests as a form of psychological distress, recent studies have opined several contributing factors to this psychological distress including sociodemographic, behavioural and educational factors, (Islam, Akter, Sikder&Griffiths, 2020). These may include aspects of gender and personality.

This topic of gender and personality as predictors of anxiety among undergraduates is often discussed in the realm of health and disease (Calvarese, 2015). Lenzo, Toffle, Tripodiand Quattropiani, (2016), believe there may be gender differences relating to mental health. For instance, research has shown that girls and women have a higher prevalence of anxiety symptoms and anxiety disorder compared to men and boys, (Altemus, 2006; Bitsika, Sharply &Melhem, 2000; Zalta&Chambless, 2012; Altemus, Sarvaiya& Epperson, 2014 and Calvarese, 2015). According to Hosseini and Khazali, (2003), there are different theories about why females are likely to develop anxiety than males are. Women may be more likely to report their symptoms including psychological differences and social factors such as gender roles. Stoyanova and Hope, (2012) added that this difference may be explained by differential reinforcement boys and girls receive from parents and society to the expression of emotions as males are not expected to admit their weaknesses, therefore are less likely to be sincere on reporting anxiety (Kamberi, Hoxha, Shala, Shahini&Vehapi, 2019).

Personality impacts all aspects of human behaviour. Therefore, it is realistic to expect to have an impact on anxiety, (Chatterjee &Kicker, 2020). For example, drawing from the 5 factors personality model, most studies have



shown a relationship between trait neuroticism and anxiety. Personality traits of neuroticism positively significantly correlated with anxiety disorders, (Mousavi & Essazadegan, 2016) personality traits such as high neuroticism and low extraversion are markers of risk for certain disorders. In a study conducted among undergraduate students, the results indicated an interaction between neuroticism and extraversion in predicting both GAD and depression. This indicates a combination of high neuroticism and low extraversion play an ethological role for anxiety (Gershuny & Sher, 1998), thereby extraversion being a protective factor.

When a student is experiencing a high level of anxiety, the anxiety may hurt academic performance and general quality of life while in school. These manifestations of anxiety may affect the learning process of the students throughout years of their academic life. Extreme levels of academic-related anxiety may also cause students to opt-out of their academic programmes. Thus, understand this context will encourage the search for strategies that can provide the student with a better response on the routine of academic life and the tension of the situations experienced. Therefore, the objective of this study was to investigate predictors of anxiety among undergraduate students. With a proper understanding of the anxiety levels of undergraduate students, adequate curricular and educational interventions can be developed to minimize their anxiety levels towards boosting their academic performance and quality of life. Hence, the need to investigate gender and personality as predictors of anxiety among undergraduate students in Enugu urban, therefore, the purpose of this study was to investigate whether gender will significantly predict anxiety among undergraduates in Enugu urban and also whether personality types will significantly predict anxiety among undergraduates in Enugu urban. It was hypothesized as follows:

1. That gender would not significantly predict anxiety among undergraduates in Enugu urban
2. And also that personality types would not significantly predict anxiety among undergraduates in Enugu urban.

METHOD

Participants

A total of five hundred and four (504) participants, 182 males and 322 females ages 17- 30 years ($M = 23.51$, $SD = 3.34$) were involved in this study. They were

selected using systematic random sampling technique from four tertiary institutions in Enugu namely, Godfrey Okoye University, Institute of Management and Technology, Enugu State University of science and Technology Enugu campus and University of Nigeria, Enugu campus. These four institutions were drawn from a pool of 10 institutions in Enugu urban using simple random sampling technique.

Instruments

Two sets of instruments were used for this study; the Big Five Inventory (BFI) and the Anxiety scale for undergraduate students (ASUS).

Big Five Inventory (BFI)

The 44-item Big five Inventory (BFI) assesses personality from a 5 dimensional perspective (Omoluabi, 2002). These 5 broad dimensions or subscales are extraversion, agreeableness, conscientiousness, neuroticism and openness. The BFI was originally designed by John, Donahue and Kentle, (1991), providing the original psychometric property for American samples with a Cronbach Alpha reliability coefficient of .80, and .85 in a 3 month test retest.

The Anxiety Scale for Undergraduate Students (ASUS)

ASUS by Singhal, (2015) was used to measure students' level of anxiety. The ASUS consists of 50 items and is on a 5 pointlikert scale. The 50 item scale contains 12 items of competitive environment, 13 items of modern societal pressure, 10 of worry about the future and 15 of psychological manifestations. The developer developed a reliability coefficient of .89 Cronbach alpha, .88 split half, .96 tests retest. Higher scores on the scale indicate higher levels of anxiety.

Procedure

The researchers wrote an official introductory letter to the Deans and HODs of different faculties and departments of the Campuses which include Management and Engineering, Enugu State University of Science and Technology, the Faculty of Law, University of Nigeria Enugu Campus, Mass Communication Department, Godfery Okoye University, and Faculty of Engineering Institute of Management and Technology respectively seeking permission to carry out the study. Following authorization, participants were selected randomly. They were given full information on the nature and purpose of the research. Therefore, voluntary participation was solicited with the



assurance of confidentiality while emphasizing data collected would be used for research purpose only. 8 research assistance was used 2 from each Campus or Universities. Seven hundred (700) questionnaires were distributed, (175 each for the four institutions); 504 questionnaires were properly filled hence were used for data analysis while 106 was wrongly filled and were discarded and 90 were not returned.

Design/Statistics

A cross-sectional design and hierarchical multiple regression statistics were used for data collection and analysis.

RESULTS

Table 1: Means, standard deviations, and correlations for demographic variables, gender, five dimension of personality type and anxiety

S/N	Variables	1	2	3	4	5	6	7	8	9	M	SD
1	Anxiety	-	.13**	.06	-.04	.06	-.01	-.11**	.42***	.33***	143.95	39.49
2	Education Level		-	-.19***	-.04	-.04	.05	.03	.01	.03	2.89	1.42
3	Religion			-	.03	.16***	-.02	.01	.06	.11**	1.35	.69
4	Gender				-	-.04	.16***	.11**	-.05	.02	1.64	.48
5	Extraversion					-	.22***	.12**	-.07*	.29***	23.82	3.60
6	Agreeableness						-	.47***	-.30***	.34***	30.00	5.17
7	Conscientiousness							-	-.14***	.27***	29.27	5.02
8	Neuroticism								-	.15***	24.04	4.47
9	Openness									-	33.32	5.72

Note. $N = 504$, * = $p < .05$ (two-tailed), ** = $p < .01$ (two-tailed),). Gender was coded 1 = male, 2 = female; Religion was coded 1 = Christianity, 2 = Islam, 3 = others, Education level was coded 1 = 100 level, 2 = 200 level, 3 = 300 level, 4 = 400 level, 5 = 500 level

Result of correlation table show that anxiety was significantly related to education level ($r = .13$, $p < .01$), conscientiousness ($r = -.11$, $p < .01$), neuroticism ($r = .42$, $p < .001$), and openness to experience ($r = .33$, $p < .001$). Thus, the higher a student move in education level the more likely he/she would dispose anxiety. Similarly, students who are more neurotic, conscientious and open would dispose higher anxiety.

Table 2: Showing the prediction of anxiety from personality and gender

	R	R ₂	R ₂ Δ	B	Beta(β)	T
Model 1	.154**	.024**	.024**			
Education Level				4.059	.146	3.239***
Religion				4.881	.085	1.892*
Model 2						
Gender	.159	.025	.001	-3.166	-.039	-.872
Model 3	.534***	.285***	.260***			
Extraversion				.134	.012	.301
Agreeableness				.559	.073	1.526
Conscientiousness				-1.323	-.168	-3.861***
Neuroticism				3.277	.371	8.904***
Openness				1.965	.285	6.478***

Regression result in table 2 above indicated that the control variables education level ($\beta = .146$, $t = 3.239$, $p < .001$); and religion ($\beta = .146$, $t = 3.239$, $p < .001$) significantly predicted anxiety among undergraduates in Enugu Urban. The control variables jointly accounted for 15% variance in the prediction of anxiety among undergraduates in Enugu Urban ($R = .154$, $p < .01$). Gender ($\beta = -.039$, $t = -.872$) entered in step two of the equation did not significantly predict anxiety among undergraduates in Enugu Urban. The five dimensions of personality type were entered last in step three of the equation. Regression result showed that only conscientiousness ($\beta = -.168$, $t = -3.861$, $p < .001$); neuroticism ($\beta = .371$, $t = 8.904$, $p < .01$), and openness ($\beta = .285$, $t = 6.478$, $p < .01$) significantly predicted anxiety among undergraduates in Enugu Urban. However, the five dimensions accounted for 26% variance as predictors of anxiety among undergraduates in Enugu Urban ($R_2\Delta = .260$, $p < .001$).

Summary of Findings

1. In the correlation table anxiety was significantly related to education level, conscientiousness, neuroticism, and openness to experience.
2. Gender did not significantly predict anxiety among undergraduates in Enugu Urban.
3. Only personality traits neuroticism, conscientiousness and openness predicted anxiety among undergraduate students in Enugu urban.



DISCUSSION

The study examined Gender and personality as predictors of anxiety among undergraduates in Enugu Urban. The findings of the study based on the first hypothesis showed that Gender would not significantly predict anxiety among undergraduates in Enugu urban, therefore the hypothesis was accepted. The study findings did not show significant gender differences in anxiety among undergraduate students. This is in line with findings from Aluh et al, (2020); Sun and Zorah, (2015) and Coker, Coker, and Sanni, (2018). Gender similarities in anxiety contradict most reported findings of a greater prevalence of anxiety among female university students (Aniebue & Onyema, 2008; Sabourin, Prater & Mason, 2018). This implies that the sex of an individual cannot predict anxiety, that is to say, that both males and females can experience anxiety and there are no gender differences in anxiety.

The second hypothesis stated that Personality types would not significantly predict anxiety among undergraduates in Enugu urban. The result gotten from the data analysis indicated that only personality traits neuroticism, conscientiousness and openness predicted anxiety among undergraduate students. This finding is in line with other studies carried out which identified trait neuroticisms to significantly predict anxiety (Mousari & Eggazadegan, 2016; Chatterjee & Kicker, 2020). However, there is little evidence showing the role of conscientiousness and openness on anxiety on the various pieces of literature reviewed in this study. Neuroticism refers to one's tendency to experience negative emotions and cope poorly with stress. It is therefore believed that undergraduates that are high in neuroticism tend to feel transiently anxious, sad, angry and vulnerable more often than undergraduates that are low in neuroticism.

Drawing from the above, anxiety is shown to interfere with people's overall wellbeing and early detection of mental health problems is very essential for determining the necessary interventions and programs which is highly relevant. Findings of this study showed varying relationships with other studies reviewed concerning gender and personality in predicting anxiety among undergraduate students. Other in-depth studies are needed to examine more thoroughly other factors related to anxiety among students.

SUMMARY AND CONCLUSION

Five hundred and four undergraduates participated in the study. This study is not without limitations, the most important of them related to the fact that the survey included only students of four out of the 10 undergraduate institutions in Enugu state and therefore data from other populations should be further considered. Despite these limitations, the study provides further evidence of the role of gender and personality in predicting anxiety among undergraduate students in Enugu urban, which must be explored in depth as a target of preventive interventions in the area of students' mental health. Previous studies showed that females are twice more likely to experience anxiety as males while personality trait neuroticism predicted anxiety. In the present study gender did not significantly predict anxiety however; personality traits neuroticism, conscientiousness and openness were shown to significantly predicted anxiety among undergraduates.

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