



The Prevalence and Determinants of Generalized Anxiety Disorder among Undergraduates of Obafemi Awolowo University Ile – Ife, Nigeria

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Abstract

This study assessed the level of generalized anxiety disorder (GAD) among undergraduates of Obafemi Awolowo university Ile – Ife, Nigeria. It also examined the socio-demographic variables (that is age, sex, religion and family background) associated with GAD. The study employed a cross-sectional survey of 1,856 respondents. A questionnaire and a standardized psychological instrument the Anxious Thoughts Inventory (AnTI) was used to elicit data from the respondents. The results revealed that 75(4%) of the respondents experienced severe symptoms of GAD. This implies that, the prevalence of GAD in the study population was 4%. The result also, indicated that, the younger the age of participants the more significant their experience of GAD. The results further revealed that males experience a significant level of GAD symptoms that females, ($F \{1,1815\} = 1.82, p < .05$). The findings also show that religion had no significant influence on the experience of GAD, ($F \{2,1815\} = 0.84, P > .05$).. Finally the results indicated that, there is no statistically significant main influence of family background on the Suffering of GAD, ($F \{2,1815\} = 0.006, P > .05$).. The study concludes that there is significant prevalence of GAD among the participants. Also socio-demographic factors; age and sex differences influenced the self-reported experience of GAD while the religion of participants and their family background had no influence their experience of GAD.

Keywords

Generalized Anxiety Disorder, Undergraduates, Age, Religion and Sex

INTRODUCTION

Anxiety a usual emotion every human experiences from time to time. Many individuals feel nervous or anxious, for instance when taking a test, or faced with an important decision. According to the World Health Organization (WHO), When an individual's level of anxiety is so high and persistent, it can result to distress and can interfere with his/her ability to lead a normal life, (WHO, 2023). Anxiety disorders are common behaviour problems experienced worldwide and their incidence is increasing daily, with about 301 million people experiencing the disorder in 2019, (WHO, 2019). This study focuses on generalized anxiety disorder (GAD), which is a widespread chronic disorder with features including persistent anxiety that is not directed at a particular object or situation, (WHO, 2022). According to the American Psychological Association (APA), generalized anxiety disorder is a persistent and excessive worrying which affects one's daily activity, (APA, p. 215-231).

Those who are affected by this disorder report persistent fear, worry and are overly concerned about everyday events (APA, 2022). GAD is a prevalent anxiety condition that affects adults, Calleo, 2008; (Manjunatha, et al., 2016).. Anxiety symptoms can also result from either a substance use or medical problem; for this reason health care professionals should rule out these conditions before diagnosing generalized anxiety disorder (Varcarolis, 2010). A diagnosis of GAD can be made if an individual is excessively worried about everyday problems for at least six months (APA, 2000; Barker, 2003). Also, if the individual finds it hard making daily decisions and keeping up with commitments due to inability to concentrate or obsession with anxiety, (Passer, et al., 2009). The usual image of a person suffering from

GAD is tense, with increased perspiration from the palms, feet, and axillae; the person may be crying, which might indicate despair, (Gelder, Mayou, & Geddes, 2005).

Approximately 4% of the world's population meet GAD criteria within a one-year period (APA, 2023), and about 5.7% to 10% fulfill the criteria at some time throughout their life (APA, 2023; Kessler, et al., 2005). Similar rates have been reported in other regions worldwide, such as in rural South Africa, (Bhagwanjee, et al., 1998). Nigerian studies by (Mapayi, et al., 2012) in a primary care setting, found a frequency of 5.6% for GAD. The study by (Esimai, et al., 2008.) also in Ile-Ife in found a prevalence of 7.2% and 6.8% among pregnant women and controls respectively, while earlier studies by (Gureje, et al., 2006) in southern Nigeria also, indicate similar rates with those around the world with a life time 5.7% prevalence and one year prevalence of 4.1%.

The term, anxiety, can simply be seen as a vague feeling of dread, a fear that occurs with/without direction to a specific object or event that is accompanied by increased arousal (Chand & Marwaha, 2022). . It can also be viewed as a feeling of discomfort, uneasiness, accompanied by tension and physical signs which result from concern about future failure, misfortune or danger (Davison, 2008; Miceli & Castelfranchi 2014). Most people become anxious in situations that they find threatening or difficult. Such anxious state generally goes away when 1) they get used to the situation or event, 2) when the situation changes or if they simply move away and 3) when they avoid the event or problem. Such sensations can grow quite powerful and last for a long time; yet, they might have negative consequences and be the basis for a number of psychological disorders. Since the most prominent defining feature of anxiety is fear, it is necessary to distinguish between fear and anxiety.

Fear is experienced in anticipation of, or in the presence of danger. It generally increases in intensity and aids the individual experiencing it decide on a response to the situation or event (that is fight or flight). All individuals have their peculiar fears; as children, they may have been fearful of cats, dogs or strangers while as adults, people may be fearful when about to give a speech, when walking down a lonely street or when taking a stand or decision. Most childhood fears have been overcome but adult fears, although mild or short-term, are most times reasonable and tied to given circumstances. A lot of people are anxious and live with fears that are not mild, short-term or reasonable. Some individuals, however, go about everyday with a high level of anxiety and this can lower an individual's quality of life. Their concerns are persistent and frequent enough to interfere with regular functioning, and they are typically out of proportion to the actual threats patients confront.

Anxiety, on the other hand, may not be focused on immediate experience of danger or a particular event. It is a more comprehensive emotional reaction than simply fear not clear or easy to understand. Rather than being focused on the present circumstances, the person's experience of anxiety is linked to anticipating a future problem. Worry is another prominent thought processes that is connected with anxiety. Worry is described simply as an individual's often preoccupation with negative thoughts about unpleasant things or events that might happen or present problems. Most people are involved in the worry process (apprehensive expectation), but are able to set aside the things/problems they worry about and continue with other things. However, if what they are worried about is so important, they are able to stop worrying as soon as the event is over. Individuals with anxiety cannot control the worry process and continue to experience negative thoughts about their problems. Research evidence suggests that the crucial feature of pathological worry is lack of control and negative effect rather than simply the anticipation of future events (Craske, et al., 1989).

Although worry, fear and anxiety are unpleasant experiences, they can be helpful and beneficial to persons experiencing them. Psychologically, they keep an individual alert to signs of danger in the environment and motivate him/her to be better prepared to solve problems. At low levels, anxiety can be adaptive, since, it acts as a warning that the individual needs to prepare for an approaching event, (Costello, 1970). When, for example, students think about their final examination, they can become anxious; that emotional response may help them begin and maintain their studies. High levels of anxiety, on the other hand, might become so incapacitating that focus and study are hampered. Such pervasive anxiety is characterized by pessimistic thoughts and feelings, which focuses one's attention inwards in the form of negative emotions and self-evaluation. This is maladaptive anxiety, which is characterised by (i) high levels of diffuse unpleasant emotion, (ii) a feeling of uncontrollability, and (iii) a change in emphasis to a primary self-focus or a condition of self-preoccupation (Barlow, 2000).

When a person is nervous, he feels afraid and tense. He may also suffer one or more unpleasant physiological symptoms, for example, an increase in heart rate, palpitations, feeling ill, tremor, perspiration, dry mouth, chest discomfort, migraines, and rapid breathing are all symptoms that often accompany anxiety (Borkovec & Hu, 1990; Hoehn-Saric, et al., 1989; Roemer, et al., 2010). As a result, individuals suffering from Generalised Anxiety Disorder (GAD) have been dubbed "Autonomic Restrictors" (Barlow, et al., 1996; Thayer, et al., 1996). These physiological symptoms are partly a result of messages sent by the brain to the nerves and other parts of the nervous system when one is anxious. Nerve impulses cause the heart, lungs, and other bodily organs to operate quicker.

Furthermore, the anxious individual releases hormones (like adrenaline) to cope with the stress into the blood stream and this can also result to symptoms caused by the heart muscles and other organs of the body..Early research has pointed to certain factors like people's fear about their limitations and responsibilities influencing the development of GAD (Bugental, 1997; May, & Yalom, 1995; Tillich, 1952). Individuals with GAD most times worry about their jobs, their relationships, their health and those of their family members and other minor everyday issues.

This study is also interested in the influence of associated factors such as age, sex differences, religion and family background, on the experience of GAD among undergraduates. Age is a significant factor that is considered in the

experience of a lot of disorders, and GAD is not different. There is no consensus on the onset age of GAD. Most studies on GAD point to early onset during the adolescent years, (Aderson et al., 1984; Barlow, 2002; Brown, et al., 1994; Kee-Lee, 2009; Lijster, et al., 2017), with the age of onset being before 31 years, (Kessler, et al., 2005; Kee-Lee, 2009; Lijster, et al., 2017). Although, research evidence has also, demonstrated that GAD is very common among the elderly, according to (Wittchen, et al., 1994; Flint, 2015; Pary, 2019) GAD was found to be most common in the age group of over 45years and least in the group between 15 to 24years, (Flint, 1994), found the prevalence rate of GAD in older adults to be as high as 7% but this has been attributed to the high usage of drugs with calming effect like tranquilizers among the old (Salzman 1991),

Adolescents begin to experience an increased stress of life around the period of their university education (Barbayannis et al., 2017; Chiang et al., 2019; Matud et al., 2020; Romeo et al., 2016; Scales et al., 2015; Shanahan, 2000; Spear, 2000; & Valentine-French, 2019). University students start worrying about their career prospects, form significant relationship in life, especially intimate relationship, and so on, this common or usual experiences undergraduates pass through during their university education can predispose them increased experience of anxiety and worry which might lead to GAD..

Similarly, sex difference is a key demographic determinant in the development of GAD. Studies suggest that females are twice the number of males that suffer from GAD, (Kessler, et al., 1995; Tyrer & Baldwin, 2006; WHO. 2019; Yonker & Gurguis, 1995). This female to male ratio has been explained in terms of the use of power in the society and women status being typically tied to the men they relate with. This may make women play 1) submissive and passive roles in relationships 2) and in the larger society in general 3) make them feel vulnerable sort of 4) They feel helpless and hyper-vigilant to indicators of trouble in their relationships. The acceptance of the wishes of others by the female especially African women and among Nigerian women for instance, and the fear of loss they have for their relationship may result in women being chronically anxious.

From the perspective of sex roles in the society, women and men cope differently with stress depending on their expected roles in the society. Generally, it is not socially acceptable for men to continue to express anxiety and this makes men to be challenged to face their fears and overcome their anxiety, (Bruch & Check, 1995). Also men, for the foregoing reason, are most open to get help for their anxiety, (Yonker & Gurguis, 1995). Women from different cultures are faced with threats in their daily life, which may predispose them to being anxious most times and result to suffering GAD. For instance, females are mostly the victims of physical abuse of battering and rape and so on Most anxiety disorders are more likely in girls and women who have been physically or sexually abused, (Burnan, et al., 1988).

Facts and figures indicate that anxiety disorders, in this case, GAD is a challenge which many people encounter in the world and the situation in Nigeria is not different. According to WHO's survey of fourteen (14) countries in all regions of the world including Nigeria, two decades ago anxiety disorders are among the most prevalent mental illnesses globally, with a frequency of between 2.4% to 18% in adult population (WHO, 2007) and it was clearly the most often diagnosed anxiety disorder in the general population with a rate estimated to be from 5% to 7% (WHO, 2007). Recent studies point about with about 301 million people experiencing anxiety disorders (WHO, 2019).

Although, not much studies have been published that focus on anxiety disorders in Nigeria, the few studies so far recorded tend to be in agreement with the rates worldwide. For instance, (Mapayi et al., 2012), found a prevalence of 5.6% in a primary health care centre. Also, (Esimai et al., 2008) found a prevalent rate of 7.2% and 6.8% among pregnant women and controls respectively, (Gureje et al., 2008) show a life time prevalence of 5.7% and twelve (12) month prevalence of 4.1% among the adult population of Western Nigeria. These findings demonstrate that Nigerians suffer from generalized anxiety and that there is need for more studies. GAD has also been linked to a high level of disability for individuals. This can be noticed in lower level of functioning in individual at home and at work (Bandelow & Michaelis, 2015; GBD 2019). The degree of impairment produced by GAD is equivalent to that caused by serious depression, according to general population research, (Bandelow & Michaelis, 2015; GBD 2019., Kessler, et al., 1994; 2001a; 2005; Wittchen, et al.).

The disorder also has a high cost on society as it results in great economic burden due particularly, to decreased work productivity (Greenberg, et al., 1999; Ikc, et al., 2017; Judd, et al., 1998; Kessler, et al., 1999; Konnopka, et al., 2009; Rovira, et al., 2012; Souetre, et al., 1994). When compared to other illnesses, after heart disease and cancer, the burden of mental diseases was ranked third, and GAD and depression were the most significant cause of burden of all mental illnesses (reference needed Kessler, et al., 2001b). This finding is in consonance with that of (Andrews, et al., 2000), that points to the high level of disability, and low level of productivity at work that GAD brings upon the society. The above is also an implication for GAD being one of the disorders with more utilization of health care centers especially primary health care facilities, (Roberge, et al., 2015; Toledo-Chávarri, et al., 2020). According to, (Maier, et al., 2000; Roberge, et al., 2015; Toledo-Chávarri, et al., 2020; Wittchen, et al., 2002), and patients with pure GAD reported more to primary care doctors and other non-mental health specialists yearly.

Although, almost all the aforementioned research were carried out in Western societies, the paucity of research on anxiety in Nigeria makes it difficult to have a good knowledge of the pattern of burden and the frequency of help seeking by those who develop GAD in Nigeria. Studies have also shown that about 33% of patients with GAD actually complain of the somatic symptoms of GAD (Judd, et al., 1998). This might also be the case in Nigeria, but the unavailability of studies cannot allow researchers draw such conclusions. Research also demonstrated that only 10% of people with GAD are seen by psychiatrists. This was explained by the fact that, GAD symptoms are similar to symptoms

of some other disorders for example Irritable Bowel Syndrome with symptoms like constipation, diarrhoea (Beck, 1994; Smith, et al., 1980), abdominal cramp, etcetera which are similar to generalized anxiety disorder symptoms.

Many anxious persons may not seek for help, this can be due in part to the fact that the problem is not identified, especially in individuals who have problems to worry about, (Brown, et al., 2001) and people who have no knowledge of the disorder or do not know where to seek help. Against this backdrop, the aim of this research is to gather data on the prevalence of generalised anxiety disorder among students of Obafemi Awolowo University.

Many studies have pointed to the prevalence GAD in a number of people worldwide like that of (Lou, et al., 2012). In a study to assess depression and anxiety in Chinese patients with Chronic Obstructive Pulmonary Disease (COPD) they assessed 1100 patients with COPD and 1100 residents without COPD and respiratory symptoms as controls. Using the Hospital Anxiety and Depression Scale (HADS) to assess depressive and anxiety symptoms in their samples, their finding revealed that patients with COPD were more likely than controls to experience anxiety and depression. A breakdown of their result shows that 35.7% of the patients were depressed compared to 7.2% of the controls. Their results also showed that 18.3% of the patient had significant anxiety symptoms compared to control with only 2% having significant anxiety symptoms. (Gracy, et al., 2012), in a study on the explanatory models of depression and anxiety Common Mental Disorder (C.M.D.) among 117 primary care attendees (30 males and 87 Females) using semi structured-interview, found most of the patients reported having somatic symptoms but further probing revealed psychological phenomena especially “tension” or “worry” but the patients considered themselves free from “mental disorders”.

Also, Nasreen, et al. (2011) discovered in a population-based study involving 720 randomly selected women in their third trimester of pregnancy from a district in Bangladesh, using the validated Bangla Version of the Edinburgh Postnatal Depression Scale to measure Antepartum Depression Symptoms (ADS) and the Trait Anxiety Inventory to assess generalised anxiety symptoms. the study of, (Maier., 2000) discovered that 25% of patients seen by physicians in primary care for psychological problems had pure GAD in the absence of any co-morbid psychiatric disorder using secondary data from patient records in primary care centres.

GAD was found to be 7.9% prevalent in a study by the International Multi-Centre for Psychological Problems in General Health Care (PPGHC; WHO, 1999), which involved assessing GAD using ICD-10 criteria with the Composite International Diagnostic Interview (CIDI) to over 25,000 primary care patients in 14 countries. The study of, (Maier, et al., 2000) discovered GAD in 22% of all primary care patients who complained of any anxiety disorder in a subgroup of roughly 2000 individuals receiving care across five European primary care centres.

Also, McLean, et al. (2012) employed secondary data in their investigation on the gender disparities, age of onset, chronicity, comorbidity, and burden of disease of anxiety disorders in the United States. The data came from the collaborative mental health Epidemiological Studies (CPES), which employed the World Health Organization Composite International Interview (WMH-CIDI) to assess the prevalence of mental diseases. They analyzed a cohort of 20,013 people and discovered that females had a greater lifetime and 12-month prevalence than males in all anxiety disorders except social anxiety, which showed no gender difference. They also found no gender differences in sickness start age or chronicity. Women were also found to be more likely than men to be diagnosed with bulimia nervosa and serious depression. Finally, their research found that anxiety disorders are more common in women than in males.

According to, Mapayi, et al. (2012), using the Composite Abuse Scale and the Hospital Anxiety and Depression Scale, researchers discovered that 5.6% of the 136 (36.7%) people who reported intimate partner violence in the previous year have significant anxiety symptoms in a study involving 373 attendants at an antenatal clinic and welfare units of a primary health centre in Ile-Ife. This was in consonance with that of (Esimai, et al., 2008) who compared the level of anxiety symptoms in 195 pregnant women and 192 control subjects attending family planning clinics in Nigeria, and observed that 14 (7.2%) and 13(6.8) of the pregnant women and control subjects respectively had significant anxiety symptoms.

Also, Gureje, et al. (2006) in their study involving 4984 subjects in the Yoruba speaking States of Nigeria, Using the World Mental Health Version of the Composite International Diagnostic Interview (WMH-CIDI), anxiety symptoms were shown to have a lifetime prevalence of 5.7% and a previous year prevalence of 4.1%.

MATERIAL AND METHOD

Research Design

This research employed a cross sectional descriptive survey design. The design allowed the researcher to elicit data on the variables of interest of the present study. Also, the variables were not actively manipulated in the study. Finally, this design enabled the researcher to characterise the variables of interest as they existed among the participants. The independent variables in the study are age, sex religion and family background while the dependent variable was generalized anxiety disorder.

Participants

The sample of the present study was drawn from a population of students, who were currently undergoing undergraduate studies at the Obafemi Awolowo University, Ile-Ife, Nigeria.. Taking into cognisance the undergraduate student's enrolment of the university, which was 19,175 as at the beginning of the 2020/2021 session as the sampling frame. Ten percent (10%) of all the undergraduate students in the institution were selected as participants for the study. The sample was drawn using an accidental sampling technique.

Research Instrument

One self-developed questionnaire plus a standardized psychological scale was used to elicit data from participants. The standardized psychological scale was the Anxious Thoughts Inventory (AnTI) The Anxious Thoughts Inventory was developed by (Wells, 1994). It is a self-reported scale with 22 items. It has a four-point likert response format ranging from 1 = Almost never to 4 = Almost always and was used to measure GAD The items are scored directly on three sub-scales that is social worry, health worry, and meta-worry scale, and summed across all 22 items to obtain a total score.

Cronbach's alpha for social anxiety is .84, .81 for health worry, and .76 for meta-worry in the original English version. Other worry measures, such as the Penn State worry Questionnaire (Wells & Papageorgiou, 1998), substantially correlate with the AnTI, with correlations of .58 for social anxiety and .40 for health worry. It also shows discriminant validity among diagnostic groups as well as between clinical and nonclinical people (Wells, 1994).

Procedure

The researcher initially sought the participant's consent by providing an acceptable explanation regarding the study aims, before handing over the research protocol to those who consented to participate in the study. The research protocol was administered to respondents in all the faculties in the institution. This was preceded by an approval of the University's ethics and research committee. The researcher and two research assistants who were as at the time of the study M.Sc students and trained by the researcher on how to administer the questionnaire assisted in the data collection. Before leaving the respondents' presence, collected questionnaires were inspected and thoroughly sorted to guarantee that they were correctly completed.

Objectives of the Study

The main objective the study is to determine the prevalence of generalised anxiety disorder among undergraduate students of Obafemi Awolowo University, Nigeria.

(for females) to 2.26% (for males) and a global rate of 4.0% among the study population.

Hypotheses Testing

Socio-demographic variables (age, sex, religion, and family background) will significantly influence generalized anxiety symptoms among participant.

RESULTS AND DISCUSSION

Prevalence of Generalised Anxiety in the Study population

The present study's main objective was to ascertain the prevalence of generalized anxiety disorder among the study population. To achieve this, norms were calculated for the sample using the extreme scores of two standard deviations above and below the mean (that is 2 SD). The result is presented in Table.1.

Table 1 Norms for Generalized Anxiety among the sample population

Group	N	M	SD	M + ISD	M - ISD
MALE	1058	37.85	9.98	~ 48	~ 28
FEMALE	798	37.15	9.95	~ 47	~ 27
TOTAL	1856	37.15	9.95	~47	~ 28

The global scores on the Anxious Thought Inventory (AnTI) used to assess generalized anxiety in the study ranged from the lowest point of zero (0) to the highest point of 77. The higher the total score, the more anxious the respondent was adjudged to be. The norm presented in Table 1 was therefore used to categorize the respondents into four groups. Those with scores in the range of zero (0) to 37 (36 for females) were categorized as having minimal anxious thoughts (generalized anxiety). Those whose scores were in the range of 38 (37 for females) to 47 (46 for females) were classified as experiencing mild anxious thoughts. Those whose scores were in the range of 48 (47 for females) were categorized as having moderate anxious thoughts (generalized anxiety). Finally, those respondents with scores in the range of 58 (57 for females) to 77 were grouped as having severe anxious thoughts (generalized anxiety).

The result is presented in Table .2. The results indicate that the frequency counts for generalized anxiety differed for males and females.

Table 2 Prevalence of Generalized Anxiety among the study Population

Category	Score Range	Male		Female		Total	
		Freq	%	Freq	%	Freq	%
Normal Anxiety	0 – 37 (36)	573	30.87	492	26.51	1065	57.4
Mild Anxiety	38 – 47 (46)	296	15.95	209	11.26	505	27.2
Moderate Anxiety	48 – 57(56)	147	7.92	64	3.45	211	11.4
Severe Anxiety	58 – 77 (76)	42	2.26	33	1.78	75	4.0

Note: The figures in parenthesis are for females

This was confirmed by a Chi-square test of association. The results of the analysis are presented in Table 3. The results indicate that there was an association between sex and severity of anxious thoughts.

Table 3 Chi-square test of association for Generalized Anxiety

	Value	Df	Asymp. Sig (2- sided)
Pearson Chi-Square	9.326	2	.009
Likelihood Ratio	9.366	2	.009
Linear by Linear Association	9.290	1	.002
N of valid Cases	1856		

The results presented in Tables 1 and 2 indicate that the females had a slightly lesser figures than the males. This translated to them having a lesser rate of anxious thoughts. The foregoing indicates the prevalence rate of generalized anxiety fall within the range of 1.78% (for females) to 2.26% (for males) and a global rate of 4.0% among the study population.

Hypotheses Testing

The hypothesis that states that socio-demographic variables (age, sex, religion, and family background) will significantly influence generalized anxiety symptoms. This hypothesis was tested with a two-way analysis of variance (2-way ANOVA). The results are presented in Table 4.. The results of data analysis indicates that there is a statistically significant main influence of age on generalized anxiety ($F \{2,1815\} = 8.32, p < .05$).

Table 4 Summary of the 2-way ANOVA on Generalized Anxiety by Socio-demographic variables

Source	Type III Sum of Squares	Df	Mean Square	F	P
Corrected Model	11644.393				
Intercept	89383.943		291.110		
Age	1576.168	40	89383.943	3.073	.000
Sex	456.699	1	788.084	943.661	.000
Religion	158.599	2	456.699	8.320	.000
FAMILY	1.174	1	79.299	4.822	.028
Age * Sex	50.680	2	0.587	0.837	.433
Age* Religion	436.879	2	25.340	0.006	.994
age * FAMILY	687.892	2	109.220	0.268	.765
sex*Religion	143.199	4	171.973	1.153	.330
sex*FAMILY	217.928	4	71.600	1.816	.123
Religion*FAMILY	160.400	2	108.964	0.756	.470
Age*Sex*Religion	209.641	4	40.100	1.150	.317
Age*Sex*FAMILY	461.677	2	104.820	0.423	.792
Age*Religion*FAMILY	94.777	4	115.419	1.107	.331
Sex*Religion*FAMILY	360.293	4	23.694	1.219	.301
Age*sex*Religion*FAMILY	414.893	2	180.146	0.250	.910
Error	171917.536	3	138.298	1.902	.150
Total	2745634.000		94.720	1.460	.224
Corrected Total	183561.929				

This finding suggests that, there are differences in the mean prevalence of generalized anxiety among the three age groups. A post-hoc comparison of the mean scores of the three age groups were therefore conducted using the Schaffer's formula.

The results of this analysis are presented in Table 5. The results indicates that the prevalence of generalized anxiety was significantly higher among adolescents ($M = 37.71$) than among the adults ($M = 34.29$; Std. Error 0.80; $MD = 3.42, P < .05$).

Table 5 Multiple Comparison of the Age Groups

Comparison	$M_1 - M_2$	MD	Standard Error	P
Adolescents Vs Young adults	37.71 - 37.36	0.35	0.49	.780
Adolescents Vs Adults	3.71 - 34.29	3.42	0.80	.000
Young Adults Vs Adults	37.36 - 34.29	3.06	0.76	.000

The results presented in Table .5 also indicates that the prevalence of generalized anxiety was significantly higher among the young adults ($M = 37.36$) than among the adults ($M = 34.29$; Std. Error = 0.76, $MD = 3.06, P < .05$). The finding suggests that the younger the person, the more anxious thoughts that the person has. Therefore, the hypothesis that the younger the respondent the higher the prevalence of generalized anxiety is accepted.

The results of the 2-way ANOVA presented in Table 4 also indicates a significant statistical main influence of sex on generalized anxiety ($F \{1,1815\} = 1.82, p < .05$). This finding suggests a sex difference in the prevalence of generalized anxiety among the participants.

A t-test comparison of the mean scores of females and males was therefore carried out. Table 6 shows the results of the analysis

Table 6 t-test comparison of Means on Generalized Anxiety by sex

Group	N	M	SD	Df	T	P
Male	1058	37.85	9.98	1854	3.48	.001
Female	798	36.23	9.82			

The results indicates that the prevalence of generalized anxiety was significantly higher among male respondents ($M = 37.85, SD = 9.98$) than female respondents ($M = 36.23, SD = 9.82; t (1854) = 3.48 p < .05$). This finding suggests that males experience a higher rate of anxious thoughts than females. The hypothesis that males have a significantly higher rate of generalized anxiety is therefore accepted.

The results presented in Table 4 indicates that there is no statistically significant main influence of religion on the prevalence of generalized anxiety ($F\{2,1815\} = 0.84, P > .05$). This finding suggests that the religion of a person does not influence his/her experience of anxious thoughts. The hypothesis that religion will significantly influence the prevalence of generalized anxiety is therefore rejected. The alternate hypothesis that religion does not significantly influence the prevalence of generalized anxiety is accepted.

The results presented in Table 4 also indicates that there is no statistically significant main influence of family background on the prevalence of generalized anxiety ($F \{2,1815\} = 0.006, P > .05$). This finding suggests that a person's family background does not influence his/her experiencing of anxious thoughts. The hypothesis that family background will significantly influence the prevalence of generalized anxiety is rejected. The alternate hypothesis that family background does not significantly influence the prevalence of generalized anxiety is accepted.

DISCUSSION OF FINDINGS

The present study tried to ascertain the prevalence of GAD among undergraduate students in a Nigerian university. It also examined the influence of socio-demographic variables (age, sex, religion and Family Background) on the experience of GAD symptoms. The result of this study indicates some interesting outcomes. The present study's findings revealed that 4.0% of the study population have symptoms of generalized anxiety that are severe enough to be categorized as suffering from generalized anxiety disorder by Anxious Thoughts Inventory (AnTI) used to measure anxiety in the study. According to the results, some of the sample population could also be categorized as having moderate levels of generalized anxiety symptoms. This result is in agreement with WHO's statistics that, about 301 million people experienced anxiety disorders in 2019, (WHO, 2019). The present study is also, in consonant with APA assertion that approximately 4% of the world's population met GAD criteria within a one-year period (APA, 2023). The World Health Organization's (WHO) survey of fourteen (14) countries including Nigeria more than a decade ago, (WHO, 2007), found a prevalence of anxiety disorders between 2.4% and 18% and GAD's prevalence to be 7.9%. Similar results were obtained in people attending primary care centres, with 25% presenting with pure GAD and in a subset of 2000 client attending primary care across five centers in Europe, 22% were found to have GAD (Maier et.al., 2000). The study by Moorea, et al., (2013) found that 37% of people who reported to a psychological clinic in a university were diagnosed for GAD, (Moorea et al., 2013) also found that 23% of adults who reported to a primary care centre were diagnosed with GAD. The above studies were carried out among those attending primary care centres, which might be responsible for the higher percentage in prevalence than the present study which involved general population of university students. Their findings, like the result obtained in this study, suggest that most people with GAD are not recognized and seem to complain of other conditions because of the overlap in GAD symptoms and symptoms of some other disorders (Beck, 1994; Smith, et al, 1980). The finding of this study was also in agreement with that of (Andlin-Sobocki & Wittchen, 2005) who found a 12% prevalence in adult population and (Esimia et.al, 2008) who found a prevalence of 7.2% and 6.8% in pregnant women and controls in Nigeria. The prevalence generalized anxiety disorder in the present study is lower than earlier researches carried out in the country, which might be due to difference in the population used by the studies. While the population for the present study was made up of undergraduates, the study by (Esimia et.al.) used a population of pregnant women Another reason for the higher rate of GAD among pregnant sample used by (Esimia et al.,) may be attributed to the fact that, although pregnancy is not an illness and also brings joy to those that are pregnant, the level of worry or anxiety such individuals may feel may be higher due their worry over successful delivery, the relationship they have with their partners especially those who their partners have denied responsibility, when compared to undergraduates grappling with only the stress their study might cause them. Also the changes in the physiological functioning of pregnant ladies might also be a source of worry for them and might have resulted in the slightly higher prevalence of GAD in the study by (Esimia et al.,). The findings of the present study suggest that university students cannot be different in their struggle against generalized anxiety symptoms especially when the age of onset of the disorder is taking into consideration. According to (Brown, et.al., 1994) GAD's onset is around the adolescent years, which is about the

minimum age required for entry into Nigerian universities. Even earlier researchers like, (Aderson, et.al., 1984; Barlow, 2002) indicated similar results.

Analysis of socio-demographic variables showed that age had an influence on the prevalence of generalized anxiety among undergraduates of Obafemi Awolowo University. This finding that there is an age difference in the self reported generalized anxiety symptoms among participants, show that adolescents self-reported more symptoms of generalized anxiety, followed by young adults and finally, adults self-reported the least symptoms of generalized anxiety. This result is consistent with literature on the age of onset for generalized anxiety, which is around the adolescent years (Aderson, et.al., 1984; Barlow, 2002; & Brown et.al., 1994).

According to, (Kessler, et.al., 2005), the age of onset for GAD is before the age of 31 years and this was also supported by the findings of (Hobbs, et al., 2013) who found that individuals between the ages of 16 to 29 years old significantly have more symptoms of generalized anxiety than those in age groups 30 to 44, 45 to 59 and 60 years and above. They also reported that those 60 years and above experienced significantly less symptom of generalized anxiety than the other age groups. Most of the respondents in this study fall in the age category of between 16 and 25 years. From the finding of the study, those classified as adolescents (16 to 20 years old) reported significantly more generalized anxiety symptoms among the sample population, followed by those who were categorized as young adults (21 to 25 years old) in the study and those that were adults; from 26 years and above reported the least level of generalized anxiety symptoms.

The period of adolescence comes with its many challenges, and for university students in this age group, most of them are new entrants ('first year). Majority of them are just beginning to comprehend the university environment and the newly found level of freedom, organising themselves as their own bosses, having to make new friends especially the anxiety that comes with heterosexual relationships and still not forgetting their primary aim of studying as undergraduates may result or cause them to experience some level of anxiety. This epoch has been regarded as one of emotional upheaval, (Hall, 1904). Research by, (Larson & Richards, 1994) discovered that teenagers reported more strong and transitory emotions than their parents. Adolescents, for example, describe being 'very happy' and 'very sad' significantly more lightly than their parents. These findings provide credence to the stereotype of teenagers as temperamental and unpredictable (Resenblum and Lewis, 2003). Erikson (1968) identified the period of adolescence as the stage of identity development in the fifth of his eight stages of life span development as 'identity versus identity confusion'.

According to Erikson (1968), during adolescence, worldview become important to individuals, which he termed 'psychological moratorium'; 'a gap between the security of childhood and the autonomy of maturity' (Erikson, 1968). The present study's result is not in consonant with the research by (Flint, 1994) that indicated that those 45 years of age experience more anxiety than those below 45 years. The gap between the years the present study was carried out and that of (Flint, 1994) could be responsible for this difference. Also the difference in result of both studies can be attributed to the setting the two studies were carried out. While, (Flint, 1994), was based on a European population, the present study's setting was in a Nigerian university environment. This result is not also in agreement with that of (Wittchen, *et al.*, 1994) which in their study found GAD to be more common in people over the age of 45 years, this can be due to the difference in the sample used for this study which was selected from an undergraduate population while their studies was based on a community population. Also, this has been linked to the frequent use of tranquilizers by older adults (Salzman, 1991).

The pattern of the result for sex was not consistent with what has been reported in literature concerning the prevalence of generalized anxiety among the sexes. This study found, unlike most other studies that, males had self-reported experiencing higher level generalised anxiety symptoms when compared with their female colleagues. The findings showed that male undergraduates self-reported more generalized anxiety symptoms than their female counterparts. The present study's finding is not in agreement with most other sex based research on the incident of generalized anxiety between the sexes like the findings of (Kessler *et.al.*, 1995; Yonker and Gurguis, 1995) which pointed to females being twice the number of males that suffer from generalized anxiety. The present study's findings contradict McLean, Asnaani, Litz, and Hofmann (2011), who discovered that the lifetime and 12-month prevalence of generalized anxiety disorder was 1.5 to 2 times higher in females than in males.

This finding may be explained from the importance the society attaches to power which, most often, is in the control of men. For this reason males may try to exhibit confidence and control despite their feeling of inadequacy. Societal expectation from both sexes in terms of expected roles in the society could also be a factor for the difference in findings of this study when compared with earlier studies. It is usually not expected for men to continually express anxiety (Bruch and Check, 1995), which might result in most men hiding their anxiety thereby worsening their situation and state of anxiety. The above is known to make men generally seek help for their anxiety symptoms (Yonker and Gurgus 1995). The present study was based on an undergraduate population and indicated that adolescents and young adults, that is participants aged 16 to 25 years constituted about 85% of the sample for the study. When such young ones (men) realise the need to seek professional help, as Yonker and Gurgus earlier pointed out, the statistics might tilt the other way round.

CONCLUSION

The present study attempted to find out the prevalence of generalized anxiety disorder and the demographic determinants of generalized anxiety among undergraduate students in a Nigerian university. Interestingly, the study established that the prevalence of generalized anxiety among the study population was 17.6%. Some others reported some symptoms of

generalized anxiety of the standardized instrument used for the study. The present study also, concluded that adolescents experienced more GAD symptoms than young adults and adults in the population involved in the study. The study also concluded that males experience more anxiety symptoms than their female counterparts. Conclusively, the present study concludes that the prevalence of GAD among the study population was 4% and also demographic variables influence the self-reported experience of GAD among university students.

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DECLARATION OF CONFLICT

The author declares that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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