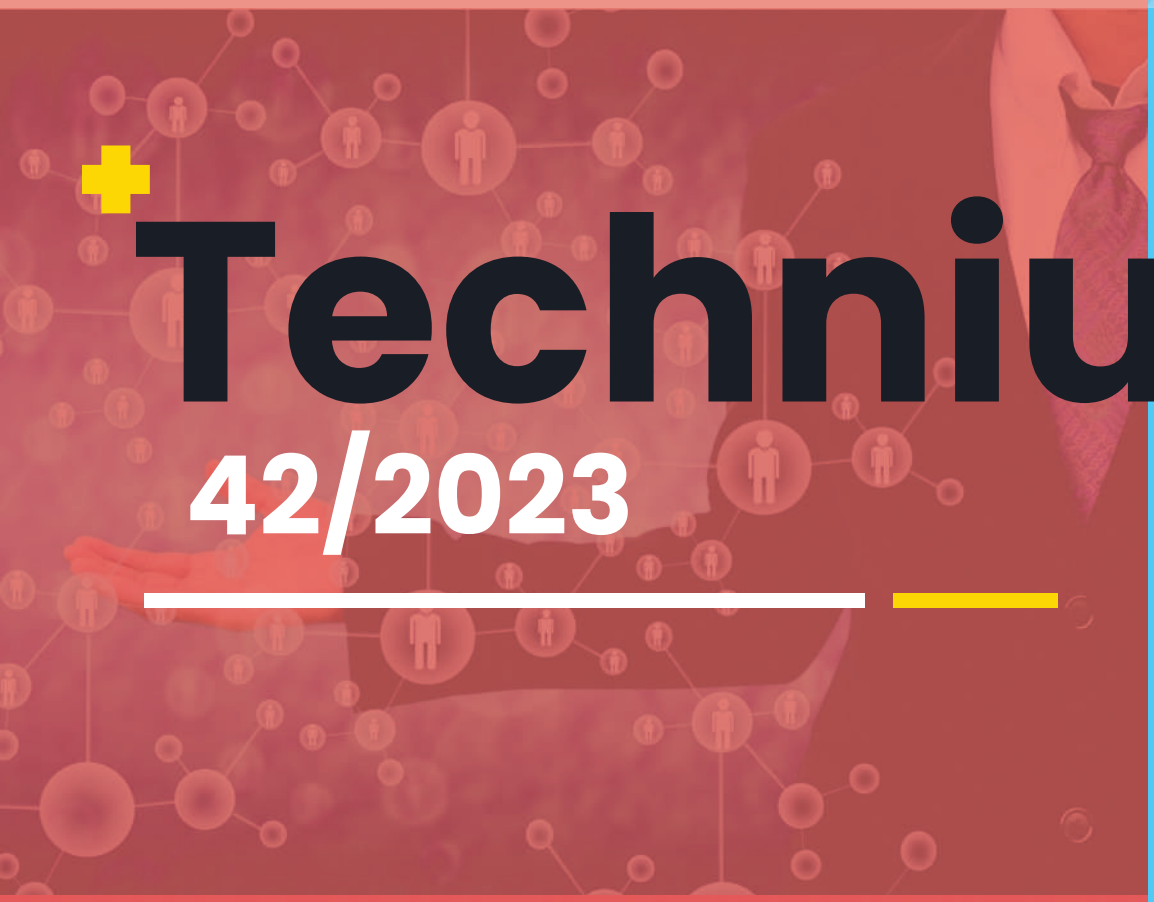
TECHNIUM
SOCIAL SCIENCES JOURNAL



Technium.

42/2023

2023

A new decade for social changes

Technium Social Sciences

Powered by PLUS COMMUNICATION
International Communication & PR

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Self-reported Symptoms of Anxiety in a Sample of Public versus Private Secondary School Students in a District in Southwest Nigeria

Sunday B. Fakunmoju

Westfield State University, Department of Social Work, Massachusetts, USA
University of Johannesburg, Department of Social Work, Faculty of Humanities, Auckland Park 2006, South Africa

Email: sfakunmoju@westfield.ma.edu

Abstract. Few studies have examined the symptoms of anxiety among students in Nigeria. This article describes the prevalence, severity, and gender differences in symptoms of anxiety, as well as factors that engender fear and anxiety among public versus private secondary school students in Nigeria. A convenience sample of 502 students from three private and five public secondary schools in southwest Nigeria completed a questionnaire and anxiety scale in the classroom. Findings show that symptoms of obsessive-compulsive disorder (n = 104, 20.7%) and fear of physical injury (n = 60, 12%) were the most and least frequently reported, respectively. Similarly, public school students were more likely than private school students to report symptoms of anxiety. From the qualitative responses, fear and anxiety about the future and academic pressure (n = 27, 24.3%) emerged as the major thing students were really afraid of. More female and public-school students reported being anxious about many things than their male and private school counterparts. Identifying symptoms of anxiety among students is critical to determining educational policies for improving their educational outcomes. Understanding school differences in symptoms of anxiety may help bridge the gap in learning outcomes among students in private and public schools.

Keywords. Anxiety disorders, separation anxiety disorder, obsessive compulsive disorder, panic/agoraphobia, and physical injury fears.

1. Introduction

Anxiety disorders are relatively common among adults and children, with lifetime prevalence rates ranging from 10.6% to 28.8% (Michael et al., 2007; National Institute of Mental Health, n.d.a, n.d.b; Somers et al., 2006). Anxiety disorders flood the mind with recurring intrusive thoughts and worries about life and problems that are exacerbated by external stressors. Attempts to manage these invasive and disturbing thoughts and gain a semblance of control often exacerbate their manifestation, particularly in the case of obsessive-compulsive disorder. Such anxieties are increasingly prevalent and inflict debilitating physical and emotional effects on sufferers (Barrera & Norton, 2009; Robinson et al., 2013). More pronounced are their impacts on adolescents and youths, who may be genetically predisposed

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

to such disorders and developmentally vulnerable to their socioeconomic stressors. These adolescents and youths tend to have poor family backgrounds and are likely to be educationally challenged (Brunelle et al., 2020; Green et al., 2005). They are more likely to experience challenges with academic performance, difficulty in establishing and maintaining meaningful relationships, and trouble in navigating the challenges of life (Hagell et al., 2013).

Despite increasing knowledge about the etiology, manifestations, and comorbidity of anxiety disorders, many questions remain about their variations among students in educational settings in developing societies. School is a steady source of stress and anxiety to students. Antagonistic experiences with peers and teachers, perceptions of academic progress and performance, and the nature and severity of disciplinary practices in school may engender, exacerbate, or reduce anxiety disorders in students. The purpose of this article is to examine the severity and differences in symptoms of anxiety between public and private senior secondary school students and to identify from qualitative responses anxiety-inducing factors or events about which students are most or least anxious. Understanding the nature and severity of symptoms of anxiety may provide background information for understanding their implications for educational outcomes.

1.1. Prevalence of Anxiety Disorders and Gender Differences

The prevalence of anxiety disorders is generally low in Nigeria (Michael et al., 2007), although reliable data are few and inconsistent. Reports by the World Health Organization estimate prevalence of anxiety disorders at 6.5% and prevalence of mood disorders at 3.3% (Kessler et al., 2007). In Nigeria, Gureje et al. (2006) put the lifetime prevalence at 5.7% among the Yoruba-speaking part of Nigeria. Frank-Briggs and Alticor (2010) put the prevalence rate at 10.28% among secondary school students in the age range of 9 to 18 years and Chinawa et al. (2018) reported a prevalence rate among medical students at 14.3%. Generalized anxiety disorder (32.9%) was the most common type of anxiety disorder (Frank-Briggs & Alikor, 2010) and a lifetime prevalence rate for social phobia among university students was reported to be 9.4% (Bella & Omigbodun, 2009). In another study, the prevalence rate for anxiety disorders was as high as 16.3% and even higher (39%) among women in late pregnancy (Adewuya et al., 2006). In a study of secondary school students, the prevalence rate was as high as 15% (Adewuya et al., 2007). Specifically, prevalence rates were 1.2% for obsessive-compulsive disorder (OCD), 2.4% for panic disorder, 2.1% for social anxiety disorder (SAD), 3.6% for generalized anxiety disorder (GAD), and 2.5% for specific phobia (Adewuya et al. 2007). Among undergraduate medical students, Opakunle et al. (2017) reported a prevalence rate of 32.1% for OCD.

Beyond Nigeria, various rates of lifetime prevalence of anxiety disorders have been reported in past studies. In a systematic review of anxiety disorders, Somers et al. (2006) reported a lifetime prevalence rate of 10.6%, whereas Michael et al. (2007) reported a lifetime prevalence rate in the range of 13.6% to 28.8% in Western societies. A population-based study by Bandelow and Michaelis (2015) found the lifetime prevalence rate to be up to 33.7%. Rates of prevalence differ by gender, as well, being more prevalent among women than men (Somers et al., 2006). Adewuya et al. (2007) reported prevalence rates of 19.6% for females and 11.4% for males. The prevalence is common among both adults and adolescents: female adolescents were more likely to develop anxiety disorders than male adolescents (Karnik et al., 2009; Lewinsohn et al., 1998). In fact, being female has frequently been associated with the presence of anxiety disorders (Asher & Aderkam, 2018; Habihirwe et al., 2018; McLean et al., 2011).

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Nevertheless, little is known about symptoms of anxiety among students in public and private secondary schools and whether the reported symptoms differ by gender and secondary school satus. Knowledge about factors or events that induce symptoms of anxiety among students also is sparse. Such knowledge may shed light on the effects of secondary school status on stymptoms of anxiety and inform educational policies for preventing learning disruption and improving learning experience of students.

1.2. Causes and Sources of Anxiety Disorders and Associated Factors

Increasing interest in anxiety disorders has resulted in biopsychosocial explanations of their development. A biological explanation describes the influence of genetic or neurotic factors in how people interpret or react to environmental cues. People with extra-sensitive temperaments and easily aroused nervous systems are more likely to overreact to environmental cues and stress than are people who are not predisposed to extra-sensitive temperaments (Jacofsky et al., n.d.). Beyond biological effects, social factors (e.g., social norms and rules) contribute to development of anxiety disorders, especially social anxiety. Social learning theory (Bandura, 1977) suggests that behaviors that characterize anxiety disorders are learned through socialization with primary caregivers, such as when children observe behaviors, watch caregivers' actions, imitate behaviors and actions, acquire experience, learn communications, assimilate beliefs, and acquire values. Severe punishment for misbehavior and errors may engender compulsive responses that are geared toward preventing errors and avoiding associated punishment. Similar to socialization with primary caregivers, anxiety-inducing behaviors are learned through interaction with the community. For example, through exposure to neighborhood violence, risks, and danger, people resort to obsessive measures and ritualistic responses to prevent accidents, avoid danger, and preserve life. Thus, social learning theory (Bandura, 1977) provides a theoretical lens for understanding the emergence of anxiety disorders, specifically OCD.

Similar to biological factors, cultural factors influence the frequency, severity, and duration of manifestions of anxiety disorders. People across societies are exposed to different cultural practices that influence how they experience and interepret stress (Nicolini et al., 2017). For example, people from societies that favor collectivism and shared responsibility may experience and manage enviromental stress better than people from societies that favor individualism and social isolation (Caldwell-Harris & Aycicegi, 2006; Nicolini et al., 2017; Popa, 2014). In fact, "a person's cultural background influences the experience and expression of emotions" (Hofmann & Hinton, 2014, p. 1) and understanding differences in cultures is critical to understanding differences in SAD (Hofmann et al., 2010).

Religiosity also influences development of anxiety disorders. Religiosity induces patterns of intense obsessive thoughts and actions that exceed the normal reactions of those who are less religious (Nicolini et al., 2017; Yorulmaz et al., 2009). For example, in examining unwanted, guilt-inducing intrusive thoughts, Hale and Clark (2013) found that "the highly religious group reported significantly more generalized guilt, obsessionality, and guilt-related negative thoughts, but not more anxiety or depression" (p. 24), suggesting that religion is relevant to understanding OCD. Religion seems to have significant effects on "content of obsessions and the severity of manifestations" (Nicolini et al. 2017, p. 285).

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Clinical characteristics of anxiety disorders, especially of GAD and panic disorder, vary across societies (Marques et al., 2011). Cultural differences do not seem to alter clinical characteristics of OCD, despite variations in adaptive responses (Nicolini et al., 2017). Nevertheless, anxiety disorders do not occur in isolation. Instead, they are comorbid with other mental health disorders (e.g., depression; Bandelow & Michaelis, 2015; Michael et al., 2007; Opakunle et al., 2017). For example, Bella and Omigbodun (2009) found social phobia to be associated with depression and psycholological distress and Preetika (2015) found manifestations of OCD in children to be comorbid with some childhood disorders (e.g., disruptive behavior disorders, attention deficit hyperactivity disorder). Blanco-Vieira and colleagues (2019) also found adult attention deficit hyperactivity disorder to be comorbid with obsessive-compulsive disorder. Although poverty increases the propensity for being classified as suffering from GAD and a tendency to misconstrue "reaction to severe environmental deficits" for mental illness (Baer et al., 2012, p. 345), many studies have indicated that poverty increases vulnerability to mental illness. In fact, many factors have been associated with mental illness in students, particularly depression, anxiety, and OCD: demanding nature of academic work (Pascoe et al., 2020; Torres et al., 2016), low self-esteem (Ahulu et al., 2020; Husain et al., 2014), poor expectations about the future and displeasure with course of study (Costa et al., 2014), lack of engagement in extracurricular activities, negative appraisal of academic performance, and poor self-assessment of health (Graner et al., 2018). These causes, sources, and associated factors with anxiety disorders have implications for understanding the manifestations of symptoms of anxiety among students and why such manifestations may differ between public and private school students in Nigeria.

1.3. Future Orientation and Anxiety Disorders

Many final-year students in secondary school, in the late adolescent stage, feel significant pressure as they face impending major changes in life and adult responsibilities. They anticipate comprehensive examinations that they must pass to graduate from secondary school, worry about entrance examinations to gain admission to higher education institutions, and ruminate about how to obtain sponsorship for higher education. Because anxiety disorders decrease during early adolescence and increase during late adolescence (Hammad, 2016; Oort et al., 2009), secondary school students in late adolescence may feel heavy pressure about their future and academic success. Fear of failure to accomplish future goals and aspirations is common in students (Hammad, 2016) and may be so strong as to invoke terror and incapacitation (Molin, 1990). Perceived ambiguity of the future as opposed to abridged assessment of the past has effects on anxiety (Hammad, 2016). Doubts and inability to accomplish desired goals or control future outcomes may engender perceived helplessness and sustained anxiety about the future (Craig et al., 2000). Preoccupation with the future, inadequate access to information and resources to clarify perceived ambiguity of the future, and perceived disparity between reality and expectations may exarcerbate anxiety disorders (Hammad, 2016; Molin 1990). In general, stress, life events, and uncertainty about transitions in life (Craig et al., 2000), as well as poverty and poor socioeconomic background (Lund et al., 2010) contribute to mental illness and anxiety disorders.

1.4. Public versus Private Schools in Nigeria

Nigeria operates both public and private school systems. Students in public schools differ in significant ways from students in private schools. Several conditions, backgrounds,

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

habits, and behaviors of students in public schools make them more susceptible to anxiety disorders than students in private schools. Public schools are affordable but relatively less stable, whereas private schools are less affordable but relatively stable. Private schools vary in cost: low-cost, medium-cost, and high-cost private schools. Tuition and fees are significantly higher in private schools than in public schools, which charge no tuition (free education). A majority of students in private schools come from middle- and upper-class backgrounds, unlike the majority of students in public schools, who come from predominantly lower-class backgrounds. As indicated by Dixon et al. (2017) "Children living in a family unit where the father has achieved a higher level of occupation or education are more likely to attend a private school" (p. 53). In fact, given the exorbitant cost of education in private schools, they are often used as a proxy for adequate socioeconomic background of students, compared to the poor backgrounds of students in public schools. Kehinde (2019) captured the plight of public schools in ways that demonstrate parental preference for private schools:

> Overpopulation results [in] overuse of academic infrastructures and facilities. . . . The unfortunate students must repeat classes over and over again. . . . Teachers are paid poorly and untimely. . . . The staff rooms have become a mini-market where wares are paraded from desk to desk. . . . Lack of dedicated teachers adds to the woes of public schools in Nigeria. . . . Some children fall victim of poor parenting. . . . Students, teachers, parents, and government alike, see education as a burden imposed on them. (para. 1-7)

Unlike public schools, private schools provide a learning environment where learning infrastructures are relatively modern and well-functioning; classroom size is smaller than that in the dilapidated infrastructure of public schools. A comparative analysis of 540 public schools versus private schools in Lagos State suggested that teaching activity was higher and teacher absenteeism was lower in private schools than in public schools (Tooleya, et al., 2005). In addition to teaching quality, parental preference for low-cost private schools is also informed by the private school's "proximity to home and strong school leadership" (Dixon et al., 2017, p. 53). Owing to the unstable public education system in Nigeria, most middle- and upper-class parents choose to register their children in private schools rather than public schools. Private schools are often immune to the unstable nature of education in public schools. The high cost of tuition in private schools is based on the presumption that only children from middle to upper classes could afford to attend major private schools. The classroom environment in most private schools is generally conducive to teaching and learning. Corporal punishment is prohibited in most private schools and behavioral problems and classroom disruptions are less frequent than in public schools.

Given the poor learning environment in public schools, middle- to upper-class Nigerians prefer to enrol their children in private schools. In a survey about parental preference for private education in Nigeria, Adebayo (2009) identified general dissatisfaction with public education and preferable characteristics of private education, such as superior infrastructure, higher-quality education, classroom management and size, and curriculum design, as motivations for parental preference for enrolling their children in private schools.

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Administrative effectiveness and disciplined staff are more notable in private schools (Akomolafe, 2012), although Ogbiji (2018) did not find any differences in administrative effectiveness.

Given these differences between public and private schools and given the negative effects of poverty and poor socioeconomic background on mental illness (Lund et al., 2010), differences in psychological disorders between public and private school students are to be reasonably expected. Understanding such differences will provide information for developing interventions to protect vulnerable students.

1.5. Rationale for Examining Public and Private School Senior Students

Studies have presented prevalence data about anxiety disorders in given populations. However, beyond prevalence data, knowledge about the severity of anxiety disorders in adolescents and youths in Nigeria has not been fully explored. Generating knowledge about prevalence and severity of anxiety disorders can be useful for identifying adolescents and youths at risks of the disorders and for determining the nature of treatment and intervention to be provided to vulnerable adolescents and youths in the region.

Unlike students in junior classes, students in senior classes face increasing pressure as they prepare for graduation and examinations for admission to higher education institutions. Because higher levels of anxiety have negative consequences for academic performance and educational outcomes (Mazzone et al., 2007; McClure et al., 2011; Owens et al., 2012), understanding the severity of anxiety disorders in senior students will provide valuable information for future interventions for this population.

Students in public schools differ from those in private schools regarding socioeconomic backgrounds. Students in public schools have poorer economic backgrounds than students in many private schools, where students predominantly come from financially stable backgrounds. Comparing anxiety disorders between private and public school students will generate knowledge that could help to identify vulnerable students who could benefit from preventive and protective interventions.

1.6. Present Study

In consideration of the above review, the present study describes symptoms of anxiety most self-reported (reported as “always” occurring) among senior secondary school students in southwestern Nigeria, as well as gender and secondary school status differences in the symptoms. The study also examines qualitative responses to the question about something else students were afraid of. Given the focus on self-reported symptoms of anxiety, the present study did not consider diagnosis of anxiety of disorders due to lack of parental or professional inputs in the study. Instead, the study examines three research questions:

1. Which are the most frequently and the least frequently self-reported symptoms of anxiety by students?
2. Do self-reported symptoms of anxiety differ by gender and secondary school status (private versus public)?
3. What factors, events, or situations do students report being most or least afraid of?

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

2. Materials and Methods

2.1. Design

The data for this analysis were derived from a cross-sectional study of senior secondary school students in three private schools and five public schools in a district (rural and urban areas) in southwestern Nigeria. The researchers obtained the list of public schools (21) and approved private schools (30) in the district and drew lots to select five public schools and three private schools. Research assistants visited each school and administered the questionnaires that focused on symptoms of anxiety to students in the classroom. Teachers in each school were blinded to the purpose of the study and students were instructed not to disclose the content of the questionnaires to teachers. The population consisted of students who were a year or two away from graduating from secondary schools. Additional information about the study, including preliminary efforts and pilot testing may be obtained from Fakunmoju and Bammeke (2015).

2.2. Sample

The sample (N = 502) consisted of male (n = 255, 50.8%) and female (n = 247, 49.2%) students, with an average age of 16.01 years (SD = 1.58, range 13–23; Fakunmoju & Bammeke, 2015). There were more students in public schools (n = 277, 55.2%) than in private schools (n = 225, 44.8%).

2.3. Measures

Symptoms of anxiety (i.e., separation anxiety, social phobia, OCD, panic/agoraphobia, physical injury fears, and GAD) were measured using the Spence Children Anxiety's Scale (Spence 1997, 1998). The scale contains 38 items that measure anxiety disorders in children: separation anxiety (6 items), social phobia (6 items), OCD (6 items), panic/agoraphobia (9 items), physical injury fears (5 items), and GAD (6 items).

Examples of items for each disorder are as follows: separation anxiety (*I would feel afraid of being on my own at home* and *I have trouble going to school in the mornings because I feel nervous or afraid*); social phobia (*I feel afraid if I have to use public toilets or bathrooms* and *I worry what other people think of me*); OCD (*I have to keep checking that I have done things right (like the switch is off, or the door is locked* and *I can't seem to get bad or silly thoughts out of my head*); panic/agoraphobia (*I suddenly start to tremble or shake when there is no reason for this* and *I worry that I will suddenly get a scared feeling when there is nothing to be afraid of*); fear of physical injury (*I am scared of being in high places or lifts (elevators)* and *I am scared of going to the doctors or dentists*); and GAD (*I worry about things* and *I worry that something bad will happen to me*). The 38 items are rated on a 4-point Likert-type scale (0 = *never*, 1 = *sometimes*, 2 = *often*, 3 = *always*). Overall internal consistency estimates for anxiety disorders in previous studies ranged from .60 to .92 (Spence, 1997, 1998; Spence et al., 2003; Spence et al., 2001); internal consistency was rated.85 in the present study. Higher scores (*always*) indicate higher levels of anxiety disorders and lower scores (*never*) indicate lower levels of anxiety disorders.

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

2.4. Data Analysis

Descriptive analysis was used to identify symptoms of anxiety that was most self-reported (*always*) among senior secondary school students (Research Question 1). Responses to items about anxiety disorders were recoded to describe the severity of the symptoms. Possible scores for social phobia, OCD, and GAD (6 items each) ranged from 0 to 18. Responses for these disorders were recoded as follows: (*Never* = 0, *Sometimes* = 1–6, *Often* = 7–12, *Always* = 13-18). Possible scores for panic/agoraphobia (9 items) ranged from 0 to 27. Responses for the disorder were recoded as follows: (*Never* = 0, *Sometimes* = 1–9, *Often* = 10–18, *Always* = 19–27). Possible scores for fear of physical injury (5 items) ranged from 0 to 15. Responses for the disorder were recoded as follows: (*Never* = 0, *Sometimes* = 1–5, *Often* = 6–10, *Always* = 11–15). Descriptive analysis was used to identify symptoms of anxiety that were most self-reported (*Always*) by senior secondary school students (Research Question 1).

Independent-samples *t* tests were used to examine whether symptoms of anxiety differed by gender and secondary school status (Research Question 2). To determine something else that students were really afraid of (Research Question 3), a qualitative analysis of 111 short responses to the open-ended question "*Is there something else that you are really afraid of*?" was performed. Majority of responses consist of one word/sentence that signifies what students were really afraid of. The coding process entails critically reviewing and coding the 111 responses, which were later organized into 10 mutually exclusive themes. Descriptive analysis was used to determine frequencies for each theme of what students were really afraid of, tabulated by gender and secondary school status. Data were analyzed using SPSS 25™ (IBM Corp., 2017).

3. Results

3.1. Prevalence and Severity of Symptoms of Anxiety

Table 1 lists the various forms and degrees of symptoms of anxiety self-reported by students. In general, senior secondary school students self-reported all symptoms of anxiety (i.e., separation anxiety, social phobia, OCD, panic/agoraphobia, fear of physical injury, and GAD). The most frequently self-reported symptoms of anxiety (*Always*) were of OCD (*n* = 104, 20.7%; Research Question 1). The least frequently self-reported symptoms of anxiety (*Never*) were of fear of physical injury (*n* = 60, 12.0%).

Table 1. Symptoms of Anxiety in Students (n, %)

Anxiety disorder	Never	Sometimes	Often	Always
Separation Anxiety	39 (7.8)	337 (67.1)	121 (24.1)	5 (1)
Social phobia	12 (2.4)	287 (57.2)	189 (37.6)	14 (2.8)
Obsessive compulsive	4 (0.8)	94 (18.7)	300 (59.8)	104 (20.7)
Panic/agoraphobia	49 (9.8)	398 (79.3)	49 (9.8)	6 (1.2)
Physical injury fears	60 (12)	275 (54.8)	150 (29.9)	17 (3.4)
Generalized anxiety	8 (1.6)	282 (56.2)	197 (39.2)	15 (3.0)

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

3.2. Differences in Symptoms of Anxiety by Gender and Secondary School Status

Results of independent-samples *t* tests suggested that symptoms of anxiety differed by gender and secondary school status (Research Question 2). Female students were more likely than male students to self-report symptoms of anxiety (Table 2). Specifically, female students reported higher levels of symptoms of separation anxiety, obsession-compulsion, panic/agoraphobia, fear of physical injury, and generalized anxiety. Similarly, public secondary school students were more likely than private secondary school students to self-report symptoms of anxiety (Table 2). Specifically, public secondary school students reported higher levels of symptoms of separation anxiety, obsession-compulsion, panic/agoraphobia, and fear of physical injury than did private secondary school students.

Table 2. Differences in Symptoms of Anxiety by Gender and Secondary School Status

Disorder	Female		Male		*t* test	Public school		Private school		*t* test
	M	*SD*	*M*	*SD*		M	*SD*	M	*SD*	
Separation anxiety	5.26	2.92	3.87	2.99	5.26**	5.00	2.96	3.99	3.04	-3.74**
Social phobia	6.57	3.17	5.60	3.29	3.37*	6.12	3.15	6.02	3.41	-.34
Obsessive compulsive	10.09	3.78	9.05	3.53	3.22*	9.91	3.59	9.14	3.76	-2.34*
Panic/agorap hobia	5.62	3.84	4.22	3.96	4.02**	5.25	3.89	4.48	4.01	-2.17*
Physical injury fears	5.44	3.10	3.14	2.77	8.74**	4.74	3.26	3.70	2.93	-3.67**
Generalized anxiety	6.85	3.26	5.47	2.96	4.97**	6.31	3.09	5.95	3.29	-1.26

*$p < .05$. **$p < .0005$

3.3. Things About Which Students Reported Being Anxious or Afraid

Secondary school students ($n = 111$) identified several things they were afraid. As shown in Table 3, what engendered the most fear was the future (economic and material well-being), failure, and academic achievement ($n = 27$, 24.3%; Research Question 3). Death, sickness, and disease ($n = 16$, 14.4%), spirituality ($n = 14$, 12.6%), and crime, accident, personal safety, or injury ($n = 13$, 11.7%) also engendered considerable fear among the students. Humiliation and public disgrace ($n = 5$, 4.5%) and physical discipline/abuse by parents and teachers ($n = 5$, 4.5%) were the least frequently reported factor that engendered fear.

More female students reported being anxious or afraid of other factors ($n = 62$, 55.9%) than male students ($n = 49$, 44.1%) (Table 4). Specifically, more female students reported being afraid of future (economic and material well-being), failure, and academic achievement ($n = 19$, 70.4%), death, sickness, and diseases ($n = 9$, 56.3%), crime, accident, personal safety, and injury ($n = 7$, 53.8%), dark places, public speaking, crowds, and being alone ($n = 6$, 60%), and miscellaneous factors ($n = 5$, 71.4%) than male students, whereas more male students reported being afraid of spirituality ($n = 11$, 78.6%) and physical discipline/abuse by parents and teachers ($n = 3$, 60%) than female students. Similarly, more public school students reported being anxious or afraid of other factors ($n = 65$, 58.6%) than private school students ($n = 46$, 41.4%) (Table 4). Specifically, more public school students reported being afraid of future (economic and material well-being), failure, and academic achievement ($n = 18$, 66.7%), crime, accident,

TECHNIUM SOCIAL SCIENCES JOURNAL

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Table 3. Things About Which Students Reported Being Anxious or Afraid

S/N	Category	Explanation	Example	*n* (%)
1	Future (economic and material well-being), failure, and academic achievement	Cases in which respondents are afraid of the future, failure, and academic achievement	Examples: financial assistance to further education; failing exams, West African Examination Council (WAEC) and university entrance (JAMB) examinations; poverty; job opportunity; and solving mathematical problems in school; financing education; securing admission to university; disappointing parents and guardians by failing exams; becoming a failure in life	27 (24.3)
2	Death, sickness, and diseases	Cases in which respondents are afraid of death, sickness, or diseases	Examples: "losing my life suddenly," "losing someone close to me," "losing my parents or any of my loved ones," deadly diseases, or being sick	16 (14.4)
3	Spirituality	Cases in which the fear reported by respondents is related to religious beliefs	Examples: "God," "heaven," "hell fire," "ghosts," "losing the kingdom of God," "missing heaven and punishment for doing something wrong (sin); seeing a ghost; or the world coming to an end soon	14 (12.6)
4	Crime, accident, personal safety, and injury	Cases in which respondents are afraid of crime, accident, or personal safety/ injury	Examples: armed robbers, accident, shooting, bad boys/people, gun, kidnapping; going to boys house; seeing bad/rough boys; shooting and beating; being raped	13 (11.7)
5	Dark places, public speaking, crowds, and being alone	Cases in which respondents are afraid of dark places, public speaking, crowds, or being alone	Examples: "speaking in front of crowd," "being in the midst of many people," speaking in public, walking alone in the dark, "being alone at home," "dark," "studying in the dark," "walking alone in the night," "shadows in the night that look like masquerade"	10 (9)

TECHNIUM SOCIAL SCIENCES JOURNAL

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

Table 3 (continued)

	Category	Explanation	Example	*n* (%)
6	Multiple factors	Cases in which respondents are afraid of multiple factors across the categories	Examples: "afraid of being raped, losing my parents or becoming a drop-out," "being in a dark place and dog," cultism, dog and accident," "snake, lizard, chicken and dog," "death, gunshots and humiliation," "failure, fighting, getting sick and crowds," "fighting and some masquerade festival," "death and anything called sex," "ocean, wild animals and electricity (*being electrocuted*)"	8 (7.2)
7	Miscellaneous	Cases in which respondents are afraid of miscellaneous factors	Examples: "having a secret date without the knowledge of my parents," "finding out that my parents are not my biological parents," "disappointing friends and families," "having a secret date without the knowledge of parents," "being found out of what I did to my friend," "the unknown," and "being fooled by others (*being deceived*)"	7 (6.3)
8	Animal	Cases in which respondents are afraid of animals	Examples: snake, lizard, chicken, dog, scorpions, aquatic and other wild animals	6 (5.4)
9	Humiliation and public disgrace	Cases in which respondents are afraid of public humiliation, disgrace, or embarrassment	Examples: "being called out in public and disgraced by my parent," "making a fool of myself," "doing something bad that will bring disgrace and punishment", and "failure and embarrassment"	5 (4.5)
10	Physical discipline/abuse by parents and teachers	Cases in which respondents are afraid of physical discipline or corporal punishment by parents and teachers	Examples: being beaten or "teacher beating student to faint" for misbehaving or without any reason, "whenever I offended my parent and they are about to beat me"	5 (4.5)

Note: In Spence's Children Anxiety Scale, respondents were asked, "*Is there something else that you are really afraid of*? *Please write down what it is*." The above are categories and examples of responses to this question. Of the 502 respondents, only 111 respondents answered "Yes" to being afraid of something else. The above describes factors or objects of which they reported being afraid.

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

personal safety, and injury (*n* = 8, 61.5%), animal (*n* = 6, 100%), multiple factors (*n* = 5, 62.5%), miscellaneous factors (*n* = 5, 71.4%), humiliation and public disgrace (*n* = 4, 80%), and physical discipline/abuse by parents and teachers (*n* = 3, 60%) than private school students, whereas more private school students reported being afraid of death, sickness, and diseases (*n* = 11, 68.8%) and spirituality (*n* = 8, 57.1%) than public school students.

Table 4. Things About Which Students Reported Being Anxious or Afraid by Gender and School Status

S/N	Category	Female		Male		Public school		Private school	
		N	*%*	*N*	*%*	*N*	*%*	*N*	*%*
1	Future (economic and material well-being), failure, and academic achievement	19	70.4	8	29.6	18	66.7	9	33.3
2	Death, sickness, and diseases	9	56.3	7	43.8	5	31.3	11	68.8
3	Spirituality	3	21.4	11	78.6	6	42.9	8	57.1
4	Crime, accident, personal safety, and injury	7	53.8	6	46.2	8	61.5	5	38.5
5	Dark places, public speaking, crowds, and being alone	6	60	4	40	5	50	5	50
6	Multiple factors	4	50	4	50	5	62.5	3	37.5
7	Miscellaneous	5	71.4	2	28.6	5	71.4	2	28.6
8	Animal	3	50	3	50	6	100	0	0
9	Humiliation and public disgrace	4	80	1	20	4	80	1	20
10	Physical discipline/abuse by parents and teachers	2	40	3	60	3	60	2	40
	Total	62	55.9	49	44.1	65	58.6	46	41.4

4. Discussion

Symptoms of anxiety among students remain to be fully explored in Nigeria. The present study examined the most and least frequently symptoms, gender and secondary school status differences in the symptoms, and factors that induce the symptoms among students. The study identified some prevalent symptoms and generated some insight across gender and secondary schools status in ways that could inform policy, practice, and research.

4.1. Prevalence and Severity of Symptoms of Anxiety

The highest prevalence rate of symptoms of obsessive-compulsive disorder (OCD) (20.7%) is consistent with previous studies that identified a prevalence rate of 28.3% among undergraduate students in Nigeria (Uwakwe, 2006). It is not surprising that OCD was most frequently self-reported by students when one considers the prevailing conditions under which learning occurs in Nigeria. Nevertheless, an understanding of the interaction between biological predisposition and socioeconomic conditions would help to put these manifestations in the proper perspective. Students experience anxiety-inducing events and stress in school. They may

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

be exposed to poor learning infrastructures, excessive disciplinary and abusive practices, and diverse emotionally, behaviorally, and academically oppressive behaviors, although the situation is more prevalent and severe in public schools than in private schools in Nigeria. Prolonged exposure to these conditions may engender disruptive memories and images that are peculiar to OCD. Because OCD generally manifests in obsessive thoughts rather than repetitive, ritualistic actions in children, the intrusive thoughts may interfere with mental and emotional well-being.

In addition to prolonged exposure to adverse conditions at school, students in their final year of school face pressure to pass final examinations for graduation, take external examinations for admission to college, overcome financial challenges, and conform to stringent behavioral expectations. They may be confronted with pressure to meet parental academic expectations and standards with limited resources and support, since education is perceived as the only escape route from poverty. Because performance failures have physical and emotional consequences and uncertainty about transitions in life (Craig et al., 2000), students may develop unhealthy thoughts and obsessions as they ruminate about the possibilities of failures. The unpredictability of the future and anticipated increase in responsibility following graduation also may evoke significant stress and predispose students to obsessive thoughts, imaginations, and worries about the future, failure, and academic achievement. The need to conform to restrictive social norms and rules and excessive precautions to prevent costly errors may engender feelings of a need for perfection in students. Educational activities can have adverse effects on students' mental health and weaken their coping skills and adaptive capacities. The stress and increased responsibility associated with learning (Torres et al., 2016), low self-esteem (Husain et al., 2014), poor expectations about the future (Costa et al., 2014), lack of opportunity to engage in extracurricular activities, and negative appraisal of academic performance (Graner et al., 2018) could enhance or exacerbate symptoms of OCD in students. Obsessive-compulsive disorder in return is a risk factor for "academic impairment and suicide attempts" (Blanco-Vieira, 2019, p. 533). In general, the identification of OCD as the symptoms of anxiety that was most frequently self-reported by students suggests the need to examine factors that are instrumental to the disorder's manifestations and to determine possible effects of such manifestations on learning and educational performance.

4.2. Differences in Symptoms of Anxiety by Gender and Secondary School Status

It is equally not surprising that public secondary school students were more likely than private secondary school students to self-report symptoms of anxiety when one considers the socioeconomic background of students in public schools and the effects of poverty and poor socioeconomic background on mental illness (Lund et al., 2010). Many parents of students in public schools are living in poverty and are unable to send their children to private schools (Kehinde, 2019). They struggle economically to feed their children, find it difficult to pay for transportation to schools, and are unable to acquire learning materials for their children. Given the categorization of public education as a proxy for poor socioeconomic background (Kehinde, 2019) and poverty as a risk factor for mental illness (Lund et al., 2010), it is easy to recognize that public school students were more likely than private school students to suffer from symptoms of anxiety. Upon systematically reviewing 115 studies conducted in 33 developed and developing countries, Lund et al. (2010) found poverty to be a potential risk for mental illness in a majority of the studies. The mental illnesses were deemed to be severe and prolonged, with serious consequences for those living in poverty. When intergenerational

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

transmission of poverty is added into the mix, it is possible that some parents of students in public schools may be struggling with mental illness as well, thereby limiting their ability to recognize the needs of their children or provide necessary help.

The influence of poverty on mental illness is instructive of the realization that more public school students reported being anxious about many things than private school students. The risk is particularly more pronounced for female students, especially public school female students, who face the additional burden of hormonal changes and receptors in the development and exacerbation of anxiety disorders (see Giedd et al., 2008). Although women or female adolescents are more likely to develop anxiety disorders than men or male adolescents (Adewuya et al., 2007; Asher & Aderka, 2018; Karnik et al., 2009; Habihirwe et al., 2018; Lewinsohn et al., 1998; McLean et al., 2011; Somers et al., 2006), the perpetual exposure to unfavorable socio-economic conditions and environmental factors poses additional pressure on their academic performance and life opportunities. This suggests the need for careful considerations of policy measures to minimize their vulnerability.

4.3. Things About Which Students Reported Being Anxious or Afraid

Identification of the future, economic well-being, and academic achievement as the major factors that engendered fear and anxiety in students is similar to a previous study that identified the effects of anxiety about the future on choice of area of specialization by students (Hammad, 2016). Instead of confidence and hope, socioeconomic and political challenges instill fear and hopelessness in students. Uncertainty about the future poses significant challenges to self-efficacy and generates self-doubts that may negatively affect students' confidence and competence. When students perceive existing opportunities as insufficient to realize future aspirations, anxiety about the capacity to accomplish goals is significantly reduced. Faulty appraisal of present challenges may exacerbate inaccurate perceptions of future goals and accomplishments.

Students face pressure to excel academically, sometimes under severe economic conditions, as education is considered the primary escape from poverty in the study region. The pressure to succeed academically, efforts to compete effectively with colleagues, and ruminations about meeting parental expectations may exacerbate preexisting symtoms of anxiety and predispose students to poor choices and decisions. As stated in a previous study, anxiety about the future predisposes students to choose areas of specialization based on popularity of the discipline, parental guidance, and collegial influence instead of objective appraisal of personal goals to ensure that intended areas of specialization align with personal abilities and competence (Hammad, 2016). Altogether, this finding suggests that attempts to prevent or reduce symptoms of anxiety in students must recognize ruminations about the future, apprehension about existing conditions, and confidence about academic achievement. The finding also suggests that measures that are aimed at reducing effects of anxiety disorders in students may focus on addressing prevailing socioeconomic and political conditions that contribute to despair about the future and low confidence in academic achivement.

Interestingly, students reported humiliation/public disgrace and physical discipline/abuse by parents and teachers as the weakest factor to engender fear and anxiety. One might have expected the students to be more afraid of physical discipline/abuse by parents and teachers, given its empirically supported effects on mental health and academic achievement (Afifi et al., 2017; Gershoff & Grogan-Kaylor, 2016). Because physical discipline is prevalent in the region, students may have adapted psychologically to abusive behaviors and therefore be

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

less apprehensive about its experience at home and school. Nevertheless, this finding suggests that students may be oblivious to the effects of physical discipline on symptoms of anxiety and may have developed adaptive responses to the extent that they are not able to articulate its effects on their mental health and academic performance. Therefore, awareness raising and education about the effects of physical discipline on anxiety disorders might increase the sensitivity that is needed to recognize its effects on educational performance and reduce its prevalence in the region.

4.4. Strengths and Limitations

Some strengths and limitations are evident in this study. The major strength relates to the ability to compare symptoms of anxiety between public and private school students with the goal of identifying similarities and differences and generating knowledge that could inform policy and practice in the region. The identification of OCD as the most frequently reported symptoms of anxiety is particularly important because students are at the developmental stage at which OCD is generally believed to occur. Many parents may not be aware of their children's obssessive thoughts and compulsive behaviors, thereby making detection and treatment difficult (Preetika, 2015). Their identification in this study provides opportunity for consideration of home, school, and community factors that may aggravate manifestations of OCD in students. Qualitative information about what engenders fear and anxiety in students provides insights about items that may be integrated in the development of research scales about anxiety disorders.

The study also has recognized limitations regarding its cross-sectional design and its delimitation to a district in southwestern region of the country, thereby limiting generalizability of findings. By using public schools as a proxy for poor socioeconomic background of students, the ability to interpret identified differences in symptoms of anxiety between public and private school students is significantly constrained. Although the dichotomy is generally tenable and empirically supported in the region, valid data about socioeconomic background of students would provide clarity about the influence of that factor on symptoms of anxiety. Because parental anxiety disorders, depression, and poverty have implications for anxiety disorders and depression in adolescents (Spence et al., 2002), the lack of data on parental anxiety disorders limits the ability to put symptoms of anxiety in students in the proper perspective. Similarly, the inability to combine empirically validated instrument and clinical diagnostic criteria for operationalizing anxiety disorders suggests the need to consider the findings as tentative. A combined use of research instruments and clinical diagnostic criteria together with professional diagnosis and parental report may provide validation of anxiety disorders among the population of students.

4.5. Implications and Recommendations

Identification of the nature and prevalence of symptoms of anxiety and a qualitative review of anxiety-inducing factors have implications for research, practice, and policy. By identifying the symptoms of anxiety that was most and least frequently reported by students, concerted efforts could be geared toward determining their effects on behaviors and learning and toward formulating specific interventions for reducing their manifestation or ameliorating their effects on students. By identifying what engenders anxiety in student, specific measures could be designed and implemented in multiple settings (e.g., home, community, school) to prevent their occurrence or mitigate their effects on learning by students. For example, to

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

mitigate students' anxiety about the future (as well as economic well-being and academic achievement), after-school programs, home tutorial sessions, or matched savings accounts and economic empowerment programs (see Ssewamala & Ismayilova, 2009) could be implemented. Given the reported association between parental assets (i.e., mother's assets) and educational outcomes of children (Zhan & Sherraden, 2003), "implementation of matched child savings account programs could improve adolescents' future orientation and psychosocial outcomes by reducing hopelessness, enhancing self-concept, and improving adolescents' confidence about their educational plans" (Karimli & Ssewamala, 2015, p. 425).

Given the likelihood of anxiety disorders in public school students and their effects on students' ability to concentrate and complete academic activities (McArdle et al., 2014), timely implementation of mental health screening might enhance early identification, facilitate early intervention, and inform services that are necessary for improving mental well-being and mitigating long-term impacts of anxiety disorders on learning and educational performance. Such a timely screening could stem the tide of underreporting and undertreatment of anxiety disorders in students in the target country. Similar implementation of empirically validated, evidence-based therapeutic approaches for enhancing self-efficacy could improve competence for academic achievement by students.

Empirically validated multisystemic interventions and "psycho-pedagogic support services" (Costa et al., 2014, p. 525) should be implemented to address the prevalence of anxiety disorders in students. A recent systematic review and meta-analysis suggests that school-based interventions are not necessarily effective in preventing anxiety disorders (Caldwell et al., 2019). Instead, a "multilevel, systems-based interventions" (e.g., a combination of educational setting-based and family and community-based intervention) may be considered in addressing anxiety disorders (Caldwell et al., 2019, p. 1011). Although a recent systematic review and meta-analysis suggests that anxiety interventions are effective in reducing anxiety symptoms (Feiss et al., 2019), utilizing multiple perspectives in addressing anxiety disorders in students could lessen their manifestations and effects and enhance academic performance and progress. If resources permit, remote intervention and integration and utilization of technology (e.g., internet, social media, web-camera, telephone etc., Krebs & Heyman, 2015; Lenhard et al., 2014; Storch et al., 2011; Turner et al., 2014) may be provided to ensure widespread outreach and services to vulnerable adolescents and youths.

Parental anxiety disorders and peer influence (e.g., blind acceptance and overidentification with opinions of peers, excessive preoccupation with judgment and criticisms of peers) have effects on the development and manifestation of anxiety disorders. Understanding parental history of anxiety disorders is critical to understanding anxiety disorders in children (Lawrence et al., 2019). Future studies should consider the effects of parental and peer influence in understanding anxiety disorders in students. Simultaneous investigation of parental and students' anxiety disorders and contextual examination of students' vulnerability to peer influence could generate meaningful knowledge that aid in understanding reinforcing mechanisms at home and school in manifestation of anxiety disorders in students.

A recent study in Nigeria identified the effects of parenting styles (specifically, decreased use of authoritative parenting style) on anxiety disorders (Adubale, 2017). Future studies may explore the effects of other parenting styles (i.e., authoritarian and permissive) and disciplinary practices on anxiety disorders among students in Nigeria. Such studies should consider parental and professional inputs in obtaining diagnosis of anxiety disorders beyond the

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

self-reported symptoms of anxiety considered in this study. Similar studies also should consider exploring the socioeconomic background of students as the proxy for understanding the effects of socioeconomic background on anxiety disorders beyond the public versus private schools dichotomy considered in the present study. Exploring socioeconomic backgrounds of students will lead to a better understanding of the effects of those backgrounds on anxiety disorders and facilitate formulation and integration of measures at home and at school to reduce their prevalence.

References

[1] Adebayo, F. A. (2009). Parents' preference for private secondary schools in Nigeria. *International Journal of Education Sciences, 1*(1), 1-6. https://doi.org/10.1080/09751122.2009.11889969

[2] Adubale, A. A. (2017). Parenting styles as predicators of anxiety and depression of in-school adolescents in Nigeria. *Africa Education Review, 14*(3-4), 111–121. https://doi.org/10.1080/18146627.2017.1264864

[3] Adewuya, A. O., Ola, B. A., & Adewumi, T. A. (2007). The 12-month prevalence of DSM-IV anxiety disorders among Nigerian secondary school adolescents aged 13-18 years. *Journal of Adolescence, 30*(6), 1071-1076. doi:10.1016/j.adolescence.2007.08.002

[4] Adewuya, A. O., Ola, B. A., Aloba, O. O., & Mapayi, B. M. (2006). Anxiety disorders among Nigerian women in late pregnancy: A controlled study. *Archives of Women's Mental Health, 9*(6), 325-328. https://doi.org/10.1007/s00737-006-0157-5

[5] Afifi, T. O., Ford, D., Gershoff, E. T., Merrick, M., Grogan-Kaylor, A., Ports, K. A., . . . Peters Bennett, R. (2017). Spanking and adult mental health impairment: The case for the designation of spanking as an adverse childhood experience. *Child Abuse & Neglect, 71*, 24-31. doi:10.1016/j.chiabu.2017.01.014

[6] Ahulu, L. D., Gyasi-Gyamerah, A. A., & Anum, A. (2020). Predicting risk and protective factors of generalized anxiety disorder: A comparative study among adolescents in Ghana, *International Journal of Adolescence and Youth, 25*(1), 574-584. https://doi.org/10.1080/02673843.2019.1698440

[7] Akomolafe, C. O. (2012). A comparative study of principals' administrative effectiveness in public and private secondary schools in Ekiti State, Nigeria. *Journal of Education and Practice, 3*(13), 39-45.

[8] Asher, M., & Aderka, I. M. (2018). Gender differences in social anxiety disorder. *Journal of Clinical Psychology, 74*(10), 1730–1741. https://doi-org/10.1002/jclp.22624

[9] Baer, J. C., Kim, M., & Wilkenfeld, B. (2012). Is it generalized anxiety disorder or poverty? An examination of poor mothers and their children. *Child and Adolescent Social Work Journal, 29*, 345-355. https://doi.org/10.1007/s10560-012-0263-3

[10] Bandelow, B., & Michaelis, S. (2015). Epidemiology of anxiety disorders in the 21st century. *Dialogues in Clinical Neuroscience, 17*(3), 327-335.

[11] Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice Hall.

[12] Barrera, T. L., & Norton, P. J. (2009). Quality of life impairment in generalized anxiety disorder, social phobia, and panic disorder. *Journal of Anxiety Disorders, 23*(8), 1086-1090. doi:10.1016/j.janxdis.2009.07.011

[13] Blanco-Vieira, T., Santos, M., Ferrão, Y. A., Torres, A. R., Miguel, E. C., Bloch, M. H., Leckman, J. F….Rosario, M. C. D. (2019). The impact of attention deficit hyperactivity

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

disorder in obsessive-compulsive disorder subjects. *Depression & Anxiety*, *36*(6), 533-542. https://doi.org/10.1002/da.22898C

[14] Bella, T. T., & Omigbodun, O. O. (2009). Social phobia in Nigerian university students: Prevalence, correlates and co-morbidity. *Social Psychiatry & Psychiatric Epidemiology*, *44*, 458-463. doi:10.1007/s00127-008-0457-3

[15] Brunelle, K., Abdulle, S. & Gorey, K. M. (2020). Anxiety and depression among socioeconomically vulnerable students with learning disabilities: Exploratory meta-analysis. *Child and Adolescent Social Work Journal*, *37*, 359–367. https://doi.org/10.1007/s10560-019-00631-w

[16] Caldwell-Harris, C. L., & Aycicegi, A. (2006). When personality and culture clash: The psychological distress of allocentrics in an individualist culture and idiocentrics in a collectivist culture. *Transcultural Psychiatry*, *43*(3), 331-361. doi:10.1177/1363461506066982

[17] Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A. . . . Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a systematic review and network meta-analysis. *Lancet Psychiatry*, *6*, 1011-1120. https://doi.org/10.1016/S2215-0366(19)30403-1

[18] Chinawa, A. T., Chinawa, J. M., Aniwada, E., Amadi, O., Ndukuba, A. C., & Uwaezuoke, S. N. (2018). Spectrum of anxiety disorders among medical students in a Nigerian medical school: A cross-sectional study with standardized screening tools. *Journal of Educational and Developmental Psychology*, *8*(2), 132-146. doi:10.5539/jedp.v8n2p132

[19] Costa, E. F. O., Rocha, M. M. V., Santos, A. T. R. A., Melo, E. V., Martins, L. A. N., & Andrade, T. M. (2014). Common mental disorders and associated factors among final-year healthcare students. *Revista da Associacao Medica Brasileira*, *60*(6), 525-530. doi:10.1590/1806-9282.60.06.009

[20] Craig, J. K., Brown, K. J., & Baum, A. (2000). *Environmental factors in the etiology of anxiety*. Retrieved from http://www.acnp.org/g4/GN401000127/Default.htm

[21] Dixon, P., Humble, S., & Tooley, J. (2017). How school choice is framed by parental preferences and family characteristics: A study in poor areas of Lagos State, Nigeria. *Economic Affairs*, *37*(1), 53-65.

[22] Ehntholt, K. A., Salkovskis, P. M., & Rimes, K. A. (1999). Obsessive-compulsive disorder, anxiety disorders, and self-esteem: An exploratory study. *Behavior Research and Therapy*, *37*(8), 771-781. doi:10.1016/s0005-7967(98)00177-6

[23] Fakunmoju, S. B. & Bammeke, F. (2015). Anxiety disorders and major depression among high school adolescents and youths in Nigeria: Understanding differential effects of physical abuse at home and school. *Journal of Adolescence*, *42*, 1-10. doi: 10.1016/j.adolescence.2015.03.012

[24] Feiss, R., Dolinger, S.B., Merritt, M., Reiche, E., Martin, K., Yanes, J. A., Thomas, C. M., & Pangelinan, M. (2019). A systematic review and meta-analysis of school-based stress, anxiety, and depression prevention programs for adolescents. *Journal of Youth and Adolescence*, *48*, 1668–1685. https://doi.org/10.1007/s10964-019-01085-0

[25] Frank-Briggs, A. I., & Alticor, E. A. D. (2010). Anxiety disorder amongst secondary school children in an urban city in Nigeria. *International Journal of Biomedical Science*, *6*(3), 246-251.

[26] Gershoff, E. T., & Grogan-Kaylor, A. (2016). Spanking and child outcomes: Old controversies and new meta-analyses. *Journal of Family Psychology*, *30*, 453-469. https://doi.org/10.1037/fam0000191

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

[27] Giedd, N. J., Keshavan, M., & Paus, T. (2008). Why do many psychiatric disorders emerge during adolescence? *Nature Review Neuroscience, 9*, 947-957. http://dx.doi.org/10.1038/nrn2513.
[28] Graner, K. M., Moraes, A. B., Torres, A. R., Lima, M. C. P., Rolim, G. S., & Ramos-Cerqueira, A. T. (2018). Prevalence and correlates of common mental disorders among dental students in Brazil. *PLoS One, 13*(9), 1-16. doi:10.1371/journal.pone.0204558
[29] Green, H., McGinnity, A., Meltzer, H., Ford, T., & Goodman, R. (2005). *Mental health of children and young people in Great Britain, 2004: Summary report*. London, UK: Office for National Statistics.
[30] Gureje, O., Lasebikan, V. O., Kola, L., & Makanjuola, V. A. (2006). Lifetime and 12-month prevalence of mental disorders in the Nigerian Survey of Mental Health and Well-Being. *British Journal of Psychiatry, 188*(5), 465-471. doi:10.1192/bjp.188.5.465
[31] Habihirwe, P., Porovecchio, S., Bramboiu, I., Ciobanu, E., Croituru, C., Cazacu, I. . . . Tavolacci, M. (2018). Depression, anxiety and stress among college students in three European countries. *European Journal of Public Health, 28*(Suppl.4). https://doi.org/10.1093/eurpub/cky214.026
[32] Hagell, A., Coleman, J., & Brooks, F. (2013). *Key data on adolescence 2013*. London, UK: Association for Young People's Health.
[33] Hale, M. A., & Clark, D. A. (2013). When good people have bad thoughts: Religiosity and the emotional regulation of guilt-inducing intrusive thoughts. *Journal of Psychology and Theology, 41*(1), 24-35. https://doi.org/10.1177/009164711304100102
[34] Hammad, M. A. (2016). Future anxiety and its relationship to students' attitude toward academic specialization. *Journal of Education and Practice, 7*(15), 54-65.
[35] Hofmann, S. G., Asnaani, A., & Hinton, D. E. (2010). Cultural aspects in social anxiety and social anxiety disorder. *Depression & Anxiety, 27*(12), 1117-1127. doi:10.1002/da.20759
[36] Hofmann, S. G., & Hinton, D. E. (2014). Cross-cultural aspects of anxiety disorders. *Current Psychiatry Reports, 16*(6), 450, 1-5. doi:10.1007/s11920-014-0450-3
[37] Husain, N., Chaudhry, I., Raza-ur-Rehman, & Ahmed, G. R. (2014). Self-esteem and obsessive compulsive disorder. *Journal of the Pakistan Medical Association, 64*(1), 64-68.
[38] Giedd, N. J., Keshavan, M., & Paus, T. (2008). Why do many psychiatric disorders emerge during adolescence? *Nature Review Neuroscience, 9*, 947-957. http://dx.doi.org/10.1038/nrn2513.
[39] IBM Corp. (2017). IBM SPSS Statistics for Windows, Version 25.0. Armonk, NY: IBM Corp.
[40] Jacofsky, M. D., Santos, M. T., Khemlani-Patel, S., & Neziroglu, F. (n.d.). *Biological explanations of anxiety disorders.* Retrieved from https://www.gulfbend.org/poc/view_ doc.php?type=doc&id=38470&cn=1
[41] Karimli, L., & Ssewamala, F. M. (2015). Do savings mediate changes in adolescents' future orientation and health-related outcomes? Findings from a randomized experiment in Uganda. *Journal of Adolescent Health, 57*(4), 425-432. https://doi.org/10.1016/j.jadohealth.2015.06.011
[42] Karnik, N. S., Soller, M., Redlich, A., Silverman, M., Kraemer, H. C., Haapanen, R., & Steiner, H. (2009). Prevalence of and gender differences in psychiatric disorders among juvenile delinquents incarcerated for nine months. *Psychiatric Services, 60*(6), 838–841. https://doi-org./10.1176/appi.ps.60.6.838

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

[43] Kehinde, S. (2019). *Nigeria's public school system: A blow*. Retrieved from https://guardian.ng/opinion/nigerias-public-school-system-a-blow/
[44] Kessler, R. C., Angermeyer, M., Anthony, J. C., Graaf, R. D., Demyttenaere, K., & Gasquet, I., . . . Üstün, T. B. (2007). Lifetime prevalence and age-of-onset distributions of mental disorders in the world health organization's world mental health survey initiative. *World Psychiatry, 6*, 168-176.
[45] Krebs, G., & Heyman, I. (2015). Obsessive-compulsive disorder in children and adolescents. *Archives of Disease in Childhood, 100*, 495–499. doi:10.1136/archdischild-2014-306934
[46] Lawrence, P. J., Murayama, K., & Creswell, C. (2019). Systematic review and meta-analysis: Anxiety and depressive disorders in offspring of parents with anxiety disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 58*(1), 46-60. doi:10.1016/j.jaac.2018.07.898
[47] Lenhard, F., Vigerland. S., Andersson. E., Rück, C., Mataix-Cols, D., Thulin, U., Ljo´tsson, B., & Serlachius, E. (2014). Internet-delivered cognitive behavior therapy for adolescents with obsessive-compulsive disorder: An open trial. *PLoS ONE, 9*(6), 1-11. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4065049/pdf/pone.0100773.pdf
[48] Lewinsohn, P. M., Gotlib, I. H., Lewinsohn, M., Seeley, J. R., & Allen, N. B. (1998). Gender differences in anxiety disorders and anxiety symptoms in adolescents. *Journal of Abnormal Psychology, 107*(1), 109–117. https://doi-org.10.1037/0021-843X.107.1.109
[49] Lund, C., Breen, A., Flisher, A. J., Kakuma, R., Corrigall, J., Joska, J. A., . . . Patel, V. (2010). Poverty and common mental disorders in low and middle income countries: A systematic review. *Social Science & Medicine, 71*(3), 517-528. https://doi.org/10.1016/j.socscimed.2010.04.027
[50] Marques, L., Robinaugh, D. J., LeBlanc, N. J., & Hinton, D. (2011). Cross-cultural variations in the prevalence and presentation of anxiety disorders. *Expert Review of Neurotherpeutics, 11*(2), 313-322. doi:10.1586/ern.10.122
[51] Mazzone, L., Ducci, F., Scoto, M. C., Passaniti, E., D'Arrigo, V. G., & Vitiello, B. (2007). The role of anxiety symptoms in school performance in a community sample of children and adolescents. *BMC Public Health, 7*(347), 1-6. doi:10.1186/1471-2458-7-347
[52] McArdle, J., Hamagami, F., Chang, J. Y., & Hishinuma, E. S. (2014). Longitudinal dynamic analyses of depression and academic achievement in the Hawaiian high schools health survey using contemporary latent variable change models. *Structural Equation Modeling: A Multidisciplinary Journal, 214*, 608-629. doi:10.1080/10705511.2014.919824
[53] McLean, C. P., Asnaani, A., Litz, B. T., & Hofmann, S. G. (2011). Gender differences in anxiety disorders: Prevalence, course of illness, comorbidity and burden of illness. *Journal of Psychiatric Research, 45*(8), 1027–1035. https://doi.org/10.1016/j.jpsychires.2011.03.006
[54] McClure, J., Meyer, L. H., Garisch, J., Fischer, R., Weir, K. F., & Walkey, F. H. (2011). Students' attributions for their best and worst marks: Do they relate to achievement? *Contemporary Educational Psychology, 36*(2), 71-81. doi:10.1016/j.cedpsych.2010.11.001
[55] Mental Health Foundation. (2014). *Living with anxiety: Understanding the role and impact of anxiety in our lives*. Retrieved from https://www.mentalhealth.org.nz/assets/A-Z/Downloads/Living-with-anxiety-report-MHF-UK-2014.pdf
[56] Michael, T., Zetsche, U., & Margraf, J. (2007). Epidemiology of anxiety disorders. *Psychiatry, 6*(4), 136-142. https://doi.org/10.1016/j.mppsy.2007.01.007

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

[57] Molin, R. (1990). Future anxiety: Clinical issues of child in the latter phases of foster care. *Journal of Child & Adolescent Social Work, 7*(6), 501-512. https://doi.org/10.1007/BF00756080
[58] Moylan, S., Maes, M., Wray, N. R., & Berk, M. (2013). The neuroprogressive nature of major depressive disorder: Pathways to disease evolution and resistance, and therapeutic implications. *Molecular Psychiatry, 185*, 595-606. doi:10.1038/mp.2012.33
[59] National Institute of Mental Health. (n.d.a). *Any anxiety disorder among adults*. Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/file_148008.pdf
[60] National Institute of Mental Health. (n.d.b). *Any anxiety disorder among children*. Retrieved from http://www.nimh.nih.gov/health/statistics/prevalence/file_148010.pdf
[61] Nicolini, H., Salin-Pascual, R., Cabrera, B., & Lanzagorta, N. (2017). Influence of culture in obsessive-compulsive disorder and its treatment. *Current Psychiatry Reviews, 13*(4), 285-292. doi:10.2174/2211556007666180115105935
[62] Ogbiji, J. E. (2018). A comparative study of the administrative effectiveness of principals of public and private secondary school in Cross River State, Nigeria. *International Journal of Academic Research in Progressive Education and Development, 7*(4), 427-434. http://dx.doi.org/10.6007/IJARPED/v7-i4/5335
[63] Oort, F., Lord, K., Verhulst, F., Ormel, J. & Huizink, A. (2009). The developmental course of anxiety symptoms during adolescence: The TRAILS study. *Journal of Child Psychology and Psychiatry, 50*(10), 1209-1217. https://doi.org/10.1111/j.1469-7610.2009.02092.x
[64] Opakunle, T., Aloba, O., Opakunle O., Oyewole, A., & Osokoya, O. (2017). Prevalence and correlates of obsessive-compulsive symptoms in a sample of undergraduate clinical medical students in Osogbo, southwestern Nigeria. *Nigerian Journal of Health Sciences, 17*(2), 66-71. doi:10.4103/njhs.njhs_6_19
[65] Owens, M., Stevenson, J., & Hadwin, J. A. (2012). Anxiety and depression in academic performance: An exploration of the mediating factors of worry and working memory. *School Psychology International, 33*(4), 433-449. doi:10.1177/0143034311427433
[66] Pascoe, M. C., Hetrick, S. E., & Parker, A. G. (2020). The impact of stress on students in secondary school and higher education. *International Journal of Adolescence and Youth, 25*(1), 104-112. https://doi.org/10.1080/02673843.2019.1596823
[67] Popa, B. (2014). Cultural differences in the appraisal of stress. *Psicológica, 35*, 745-760.
[68] Preetika, C. (2015). Obsessive compulsive disorder (OCD) in childhood and adolescence. *Journal of Psychological Abnormalities in Children, 4*(3), 1-3. doi:10.4172/2329-9525.1000143
[69] Robinson, O. J., Vytal, K., Cornwell, B. R., & Grillon, C. (2013). The impact of anxiety upon cognition: Perspectives from human threat of shock studies. *Frontiers in Human Neuroscience, 7*, 1-13. doi:10.3389/fnhum.2013.00203
[70] Somers, J. M., Goldner, E. M., Waraich, P., & Hsu, L. (2006). Prevalence and incidence studies of anxiety disorders: A systematic review of the literature. *Canadian Journal of Psychiatry, 51*(2), 100-113. doi:10.1177/070674370605100206
[71] Spence, S. H. (1997). Structure of anxiety symptoms among children: A confirmatory factor-analytic study. *Journal of Abnormal Psychology, 106*(2), 280-297. doi:10.1037//0021-843x.106.2.280

Technium Social Sciences Journal
Vol. 42, 209-230, April, 2023
ISSN: 2668-7798
DOI: 10.47577/tssj.v42i1.8622
www.techniumscience.com

[72] Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy, 36*(5), 545-566. Retrieved from https://www.scaswebsite.com/docs/spence-1998-scas.pdf
[73] Spence, S. H., Barrett, P. M., & Turner, C. M. (2003). Psychometric properties of the Spence Children's Anxiety Scale with young adolescents. *Journal of Anxiety Disorders*, *17*(6), 605-625. doi:10.1016/s0887-6185(02)00236-0
[74] Spence, S. H., Najman, J. M., Bor, W., O'Callaghan, M. J., & Williams, G. M. (2002). Maternal anxiety and depression, poverty and marital relationship factors during early childhood as predictors of anxiety and depressive symptoms in adolescence. *Journal of Child Psychology and Psychiatry, 43*(4), 457-469. doi:10.1111/1469-7610.00037
[75] Spence, S. H., Rapee, R., McDonald, C., & Ingram, M. (2001). The structure of anxiety symptoms among preschoolers. *Behaviour Research and Therapy, 39*, 1293-1316. doi:10.1016/s0005-7967(00)00098-x
[76] Ssewamala, F. M., & Ismayilova, L. (2009). Integrating children's savings accounts in the care and support of orphaned adolescents in rural Uganda. *Social Service Review, 83*(3), 453-472. doi:10.1086/605941
[77] Stein, M. B., Roy-Byrne, P. P., Craske, M. G., Bystritsky, A., Sullivan, G., Pyne, J. M., . . . Sherbourne, C. D. (2005). Functional impact and health utility of anxiety disorders in primary care outpatients. *Medical Care, 43*(12), 1164-1170.
[78] Storch, E. A., Caporino, N. E., Morgan, J. R., Lewin, A. B., Rojas, A., Brauer, L….Murphy, T. K. (2011). Preliminary investigation of web-camera delivered cognitive-behavioral therapy for youth with obsessive-compulsive disorder. *Psychiatry Research, 189*(3), 407-412. doi: 10.1016/j.psychres.2011.05.047
[79] Tooleya, J., Dixon, P., & Olaniyan, O. (2005). Private and public schooling in low-income areas of Lagos State, Nigeria: A census and comparative survey. *International Journal of Educational Research, 43*, 125-146. doi:10.1016/j.ijer.2006.05.001
[80] Torres, A. R., Cruz, B. L., Vicentini, H. C., Lima, M. C. P., & Ramos-Cerqueira, A. T. A. (2016). Obsessive-compulsive symptoms in medical students: Prevalence, severity, and correlates. *Academic Psychiatry*, *40*(1), 46-54. doi:10.1007/s40596-015-0357-2
[81] Turner, C. M., Mataix-Cols. D., Lovell, K., Krebs, G., Lang, K., Byford, S….Heyman, I. (2014). Telephone cognitive-behavioral therapy for adolescents with obsessive-compulsive disorder: A randomized controlled non-inferiority trial. *Journal of the American Academy of Child & Adolescent Psychiatry, 53*(12), 1298-1307. doi: 10.1016/j.jaac.2014.09.012.
[82] Uwakwe, R. (2006). Obsessive-compulsive symptoms in a sample of Nigerian undergraduate students: Comparison with two instruments. *Journal of Biomedical Investigation, 4*(1), 1-8. doi:10.4314/jbi.v4i1.30407
[83] Yorulmaz, O., Gençöz, T., & Woody, S. (2009). OCD cognitions and symptoms in different religious contexts. *Journal of Anxiety Disorders, 23*(3), 401-406. doi:10.1016/j.janxdis.2008.11.001
[84] Zhan, M., & Sherraden, M. (2003). Assets, expectations, and children's educational achievement in female-headed households. *Social Service Review, 77*(2), 191-211. https://www.jstor.org/stable/10.1086/373905