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MENTAL WELLBEING AMONG UNDERGRADUATES IN EASTERN NIGERIA: A FUNCTION OF ACADEMIC STRESS, SUBSTANCE ABUSE AND AGE

Ngozi Sydney-Agbor*, Richars Ebeh and Martins Onyeanu

Department of Psychology, Imo State University, Owerri, Nigeria

ABSTRACT: *Predictors of students' mental wellbeing were studied among 348 undergraduates selected through random cluster sampling from the Faculties of Social Sciences of three higher institutions in Eastern Nigeria. Participants' ages ranged from 16 to 33 years, with the mean age of 23.15 and a standard deviation of 3.46. Variables considered include academic stress, substance abuse, age and institution type. Descriptive Cross-Sectional Design was employed while Standard Multiple Regression and 2-Way ANOVA were adopted for data collection and analyses respectively. Results revealed that academic stress, substance abuse and age had significant inverse relationship with mental wellbeing. Mental wellbeing and academic stress did not differ across gender, while type of institution influenced academic stress (P< .05). The researchers recommended stronger awareness of the implications of drug use and the re-structuring of academic programmes that can minimize stress. Also, the need for a free functional counseling unit to enable students obtain professional advice that will help promote mental well being was advocated.*

KEYWORDS: Mental Wellbeing, Academic Stress, Substance Abuse, Undergraduates, Eastern Nigeria.

INTRODUCTION

Mental wellbeing has been of significant interest to Psychologists especially health Psychologists with a view to identifying factors that contribute to it. This is pertinent since research evidence has revealed that mental state, behaviour and health are related (Taylor, 2002). Thus researchers have reported impact of physical and psychological stressors on mental wellbeing. Athough some level of stress is healthy and can be adaptive (Seyle, 1976), chronic stress has been associated with negative outcome even among students (Conner, Pope & Galloway 2010, Kaplan, Liu & Kaplan, 2005, Lanier, Nicholson &, Duncan 2001).

Mild stress including academic stress can be stimulating, motivating and sometimes desirable. But as it becomes more severe, stress can bring on physical, mental, psychological and behavioural problems (Downing & Miyan, 2002). Symptoms of stress may be cognitive/mental, emotional, physical, or behavioral. Cognitive/mental symptoms involve poor memory, inability to concentrate, poor judgment, confusion, indecision, constant worrying. Emotional symptoms include increased emotional reaction- more tearful or sensitive or aggressive, mood swings, negative or depressive feelings (Health and Safety Executive, HSE, 2014). Physical symptoms: aches and pains, diarrhoea or constipation, nausea, dizziness, chest pain, rapid heartbeat, loss of sex drive, frequent colds. Behavioral symptoms, change in appetite, sleep disturbance, social withdrawal, procrastinating or neglecting responsibilities, using alcohol, cigarettes, or drugs to relax etc (Downing & Miyan, 2002).

Several studies have indicated that the stressors most frequently reported by adolescents are related to school, such as studying for test, getting good grades, completing homework, and

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time management. These studies also reported that high of level of students' related stress reduces the mental wellbeing of the students (APA, 2009; Conner, Pope & Galloway, 2010; De Anda, Baroni, Boskin, Buchwald, Morgan, Siegel & Weiss 2000; Lohman & Jarvis, 2009; Mostafaei 2012; Darllin, Jonebory & Runeson, 2005). Academic stress is a product of combination of academic related demands that exceed the adaptive source available to an individual. Institutional level stressors include: overcrowded lecture halls, semester systems, inadequate resources to perform academic work (Awino & Agolla, 2008). The pressure to perform well in the examination or test and time allocation makes academic environment very stressful (Erkutlu & Chafra, 2006). This is likely to affect the social relations both within the institution and outside which affects the individual's life in terms of commitment to achieving the goals (Fairbrother & Warn, 2003).

Studies have also revealed that individuals exposed to stress are more likely to abuse alcohol and other drugs or undergo relapse (Sinha , Fuse , Aubin & O'Malley 2000). According to Uwaoma (2002), substance abuse is generally established when substance impairs the user's social, physical, mental and emotional wellbeing resulting to harm either to the user or his/her society. Technically, drug abuse could be viewed as the incessant and excessive use of any substance that alters the user's mood without medical need. Sometimes, people abuse drugs by simply using illegal drugs just to relieve some level of stress or pains (Schuckit, 1998). Negative reinforcement theory posits that when people are faced with social pressure, frustration, academic stress, family workload, etc, they are likely to find solace in psychoactive substance use and abuse. It appears that psychoactive substance may help to reduce unpleasant feeling of pressure and frustration and through negative reinforcement. Substance Abuse and Mental Health Service Administration (2005) indicated that the impact of substance use and the development of problematic substance use (that is, abuse and dependence) is significant and is most likely to occur during emerging adulthood. Further studies by SAMHSA (2005) indicated that the problematic substance use has an adverse impact on mental wellbeing.

Mental wellbeing has also been linked with demographic variables such as age and gender. Mostafaei (2012) found in a study of 100 university students studying at university of Mahabad Payame Noor in 2011 -2012 academic year that age and mental health were not significant likewise gender and mental health. Other studies found significant relationship with adolescents age and gender with Psychosocial health, Psychosomatic symptoms and depressive symptoms (Piko & Fitzpatrick 2001).

Statement of the Problem

Sociological approach to mental health and wellbeing maintains that mental wellbeing and illness emanate from various aspects of social circumstances. Based on this, the mental wellbeing of undergraduates can be influenced by their university environment. "In the past, Nigeria's educational system was one of the best in the continent of Africa as it boasted one of the oldest, biggest and most comprehensive university education systems. In the 1970s, people of different nationalities moved "en-masse" to acquire qualitative education in Nigeria (Adedipe 2013). After many years however, the situation changed. Nigerian Public Universities have witnessed disrupted academic calendar due to incessant strike actions resulting to crashed academic programmes with its significant impact on the students. This challenge to meet up with academic load could increase academic stress and mar mental wellbeing. In addition, most public universities in Nigeria are over populated and poorly funded especially the state owned universities leading to limited academic space and overcrowded

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lecture halls compared to most private universities. Also, these incessant strike actions do not occur in private universities, hence the need to compare the academic stress of students from private and public universities.

Similarly, the issue of substance abuse over the years is increasing daily in Nigeria. For example, the Nigerian Drug Law Enforcement Agency (1992) reported the result of three studies: the school survey, hospital records and drug trafficking records in Nigeria. The school survey showed that among the secondary school students in Lagos State, 11% currently abuse alcohol, 10% abuse valium, 6% abuse reactive drugs and 4% abuse cigarette. Over 1.5% of the students abuse cannabis, heroin and cocaine. Efforts directed at curbing drug abuse are not yielding great results; this is because the causative factors that are enhancing the substance use and abuse have not been adequately checked. The inability to check the increasing economic, social, psychological and academic stressors in Nigeria has increased the incidence of substance use and abuse. These backdrops formed the bases of this research from which the following hypotheses were postulated:

(1) There will be an inverse relationship between academic stress and students' mental wellbeing

(2) Substance abuse will negatively correlate with students' mental wellbeing.

(3) There will be a significant relationship between students age and mental wellbeing

(4) Gender will significantly predict mental wellbeing

(5) Male and female undergraduates will differ on academic stress

(6) Students from public universities will differ from their counterparts in private university on level of academic stress

METHOD

Participants:

The sample was drawn from the Faculties of Social Sciences of three higher institutions namely: Imo State University (Public Institution), Renaissance University and Madonna University (Private owned Institutions) all in South-Eastern Nigeria. Participants comprised of 348 students, 184 and 164 males and females respectively with ages from 16 to 33 year (M= 23.15; SD= 3.46). The participants were selected through random cluster sampling technique among students found accidentally in their respective lecture halls. 450 questionnaires were initially distributed, 425 were retrieved (94.44%), 77 out of the 425 (18.12%) were discarded for incomplete responses remaining 348 (81.88%) used in the study. The participants responded to the questionnaires on the spot.

Measures

Three instruments were employed in this study. The first was Students Academic Stress Scale (SASS) developed by Busari (2011) which contains 50-items. It measures students' affective, behavioural, cognitive and physiological responses to stress at university level. SASS is a 5-point Likert Scale ranging from 1- None of the time to 5-All of the time. Busari (2011) provided the psychometric properties for Nigeria sample. He reported an internal consistencies

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between .65 - .96 and obtained a divergent validity of .05. The SASS was further revalidated by the researcher and obtained a norm of 130.28 for males and 132.05 for females, with a reliability of .51. Sample items are: 'my emotions stop me from studying', 'I have difficulty eating', and 'I feel so much restless while receiving lectures'.

The second scale was Drug Abuse Screening Test Scale (DAST) (Skinner (1989), it has 28-items. A score of 1 is given for each "YES" response; except for item 4,5,7 for which a "NO" response is given a score of 1. Skinner (1982) provided the original psychometric properties for American sample. He reported internal consistencies of .92 - .94 and a test retest reliability of .78. A value of more than .90 indicates that the DAST is highly a homogenous test. The Nigerian norm and reliability were also established, 6.2 for females, 3.67 for male, and internal consistency reliability of 0.72. Some of the items are: 'Have you ever used drugs other than those required for medical reasons?' 'Can you get through the week without using drug'? This scale was modified in other to suit the students. For example one of the items which asked 'has drug abuse ever created problem between you and your spouse' was modified as 'has drug abuse ever created problem between you and your parents'?

The third scale was Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), developed by researchers at Warwick and Edinburgh University. Split half reliability of .61 was obtained by the researcher while the norms for the scale are 53.22 and 51.48 for males and females respectively. Some of the items state: "I've been feeling useful", "I've been thinking clearly", and "I've been feeling cheerful". WEMWBS is also a Likert scale with options ranging from 'None of the time' (1) to 'All of the time' (5).

Design and Statistics

Cross-sectional descriptive design was adopted since a segment of a large population cutting across different demographic variables was used. Data was analyzed using Standard Multiple Regression and 2-way Analysis of Variance (ANOVA). Multiple Regression allows for the simultaneous investigation of the effect of two or more predictor variables on a single interval scale criterion variable. This statistic took care of hypotheses 1, 2, 3 and 4 while ANOVA was employed for hypotheses 5 and 6. These were done using the Statistical Package for the Social Sciences (SPSS) version 15.

RESULT

Table1: Descriptive statistics

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Mental Wellbeing	348	14.00	70.00	49.82	9.39
Academic Stress	384	72.00	251.00	138.34	30.04
Substance Abuse	348	1.00	26.00	7.42	6.76
Age	348	16.00	33.00	23.15	3.46

A look at the above table revealed that the students on the average had poor mental wellbeing, high academic stress and abuse drug.

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Table2: Summary Regression Analysis of relationship between Academic Stress, Substance Abuse, Age and Gender on Mental Wellbeing.

Regression	**R^2**	**Adj. R^2**	**F-value**	**P-value**
Values	.304	.296	37.47	.000

The table above gives the adjusted R^2 value at .296. This shows that 29.6% of the variance on mental wellbeing can be explained by a combination of causal factors. Also, mental wellbeing can be predicted by academic stress, substance abuse, age and gender i.e., the four independent variables have significant joint impact on mental wellbeing. [*F (4, 343) = 37.50, P< .05*].

Table 3: Standard Linear Multiple Regression Result

Model	**Beta**	**T**	**P**
Academic Stress	-.240	-4.78	.000
Substance Abuse	-.354	-6.98	.000
Age	-.126	-2.64	.667
Gender	-.020	-.43	.009

Dependent Variable: Mental Wellbeing

From table 3 above, all the variables except gender *(b = -.02, t (347) = -.43, p =.67)* had significant inverse relationship with mental wellbeing: academic stress *(b = -. 24, t (221) = -4.78, p < .05);* Substance use *(b = -.35, t (347) = -6.98, p < .05)* and age *(b = -.13, t (347) = -2.64, p =.01).*

Table 4: Summary Table of Two-Way ANOVA for Gender and Type of Institution on Academic Stress

Variables	***Mean Score***		***Standard Deviation***			
	Males	**Females**	**Males**	**Females**	**F**	**P**
Gender	139.96	136.52	29.31	30.82	1.76	.186
	Public	**Private**	**Public**	**Private**		
Institution	131.05	150.87	26.67	31.43	39.92	.000

The f-test above was not significant for gender, [*F(1,344),=1.76, p= 1.85*]. Male students (M = 139.96; SD =29.31) did not differ from their female counterparts (M = 136.52; SD = 30.82) on academic stress. However, institution type was significant, [*F (1,344) =39.92, p<.05*]. Academic stress was higher among students in the private institutions (M=150.86, D =31.43) than in the public institution (M=131.05; SD = 26.67).

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DISCUSSION

The significant inverse relationship between academic stress and mental wellbeing implies that as scores on substance abuse increase, mental wellbeing decreases. Thus, substance use reduces mental wellbeing. This entails that academic stress which is a product of a combination of academic related demands that exceeds the adaptive resources available for an individual predicts students' mental wellbeing. Most researchers that carried out studies on similar research work, reported findings that are similar (APA, 2009; Conner, Pope & Galloway, 2010; De Anda, et.al 2000; Lohman & Jarvis, 2009; Mostafaei 2012). Academic demands such as: studying effectively to pass examinations and difficulty in understanding certain textbooks, lack of lecture hall, attitude of some lecturers toward their students and lectures, financial difficulties in obtaining the necessary things required for effective learning on the part of some students, etc, can cause adverse impacts on students' mental wellbeing. This therefore confirms that mental state and mental health are related as earlier reported by Taylor (2002).

Substance abuse also significantly predicted mental wellbeing. The negative correlation is also an indication that substance abuse has adverse impact on mental wellbeing. The higher the drug abuse, the lower the mental wellbeing. Ringen, Melle, Birkenaes, Engh, Faerden, Vaskin (2006) found low mental functioning among adults with high level of substance abuse. Other findings are also in line with the present study such as Chassin, Flora, & King, (2004), SAMHSA (2005). Substance abuse mostly occurs when an individual faces inter alia frustration, anxiety, peer pressure and stress. The more substance is been abused to overcome such feelings, the more it reduces one's social, behavioural, mental and emotional functioning, this in turn causes impairment on the user's mental health or wellbeing.

The regression result also supported the third hypothesis, the lower the age, the higher the mental wellbeing. A plausible explanation to this finding is that younger people have lesser responsibilities and as such not saddled with much responsibilities unlike their older counterparts some of whom are married or working. Therefore combining academic responsibilities with that of work and family could have significant impact on mental health. This finding corroborates with Piko & Fitzpatrick'S (2001) study.

Gender was not significant in this study, which is in line with Mostafaei (2012) study of Mahabad Payame Noor undergraduates in 2011 -2012 academic year. Similarly, gender differences did not exist in terms of academic stress. Both male and female students are in the same institutions and as such face the same challenging academic environment. Also the need to obtain good grade is not gender specific. One can infer therefore that no gender is immune to stress and poor mental health. On the contrary, academic stress was higher among students in the private institutions than in the public institution. The reason for this finding is not far-fetched. Undergraduates in private universities undergo strict supervision during lectures and examination. This is made possible due their sparse population unlike the public universities that are densely populated. Thus they put in greater efforts in their academic endeavours which could lead to stress.

The findings of this research have far reaching implications. First students experiencing more academic stress face various kinds of academic difficulties, frustrations, anxieties and pressures. These negative factors affect their attitude towards education and in turn, their mental health and wellbeing is generally affected. The adverse impact of academic stress on

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students' mental wellbeing can lead to examination anxiety, low marks, poor memory, lack of concentration and in general low academic performance. It is therefore recommended that School administration and lecturers should schedule lectures in a way that it will reduce academic pressure and stress on students. University management should also make learning environment more conducive by providing adequate structures and materials needed for learning. Secondly, Substance abuse has negative impact on mental wellbeing. Instead of using drugs to escape certain unpleasant factors such as anxiety, frustration, cognitive overload and even academic stress students should be counseled on better coping strategies to reduce stress. Those already involved in drugs should attend therapeutic sessions that will help them reduce or stop excessive substance intake. The service of psychologists in the university can be employed to do so.

This study is not without limitations, first, being a survey, extraneous variables not controlled. Secondly, the students responded to the questionnaire on the spot which could not have allowed them the opportunity to thoroughly respond to the items. Thirdly, the sample size is not a representative sample of the students in the faculty of social sciences of the institutions studied. Therefore, generalizations should be made with caution.

In conclusion, stress can be motivating at the mild stage. However, at severe stage it could lead to frustration, social pressure, family workload, cognitive overload, which in turn influences an individual to use and abuse substances in other to escape from unpleasant feelings of life situation. This in other words entails that the combination of stress and substance abuse can have an adverse impact on individual's mental wellbeing.

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