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

Ngozi Sydney-Agbor<sup>1\*</sup>, Richards Ebeh<sup>2</sup> & Martins Onyeanu<sup>3</sup>

<sup>1,2,3</sup>, Department of Psychology, Imo State University, Owerri, Nigeria

\*ngozisydney@gmail.com

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 a 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 was adopted for data collection and analyses respectively. Results revealed that academic stress, substance abuse and age had significant negative relationship with mental wellbeing whereas mental wellbeing did not differ across gender (P<.01). 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 counselling 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. Although 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; 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 behavioural. 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. Behavioural 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 time management. These studies also reported that high 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; Dahlin, Joneborg & 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, 1994). 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 adolescent's 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 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) Academic stress will negatively predict students' mental wellbeing of students.
- (2) Substance abuse will negatively predict students' mental wellbeing.
- (3) Students age will significantly predict mental wellbeing
- (4) Gender will significantly predict mental wellbeing

### **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 were allowed some time to respond to the questionnaires.

### 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 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 (1989) 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. The scale as reported by the experts has a test-re-test reliability (at one week) of .83. Split half reliability of .61 was obtained by the researchers 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**

Descriptive Cross-sectional Survey design was adopted since a segment of a large population cutting across different demographic variables, assessed at the same time was employed. Data was analyzed using Standard Multiple Regression, this allows for the simultaneous investigation of the effect of two or more predictor variables on a single interval scale criterion variable. This was done using the Statistical Package for the Social Sciences (SPSS) version 20.

### **RESULT**

Table1: Descriptive statistics

| Variables        | N   | Minimum | Maximum | Mean   | Standard<br>Deviation |
|------------------|-----|---------|---------|--------|-----------------------|
| Mental Wellbeing | 348 | 14.00   | 70.00   | 49.82  | 9.39                  |
| Academic Stress  | 348 | 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 because the mean score of 49.82 is below the norm (52.35 for males and females) which is an indication of poor mental wellbeing. The students also had mean scores higher than the academic stress and drug abuse instruments which are indications of high academic stress and drug abuse respectively.

Table 2: Standard Linear Multiple Regression Result

| Model           | $\mathbb{R}^2$ | Adj. R <sup>2</sup> | F- value | β   | T     | P    |
|-----------------|----------------|---------------------|----------|-----|-------|------|
|                 | .304           | .296                | 37.47    |     |       |      |
| Academic Stress |                |                     |          | 240 | -4.78 | .000 |
| Substance Abuse |                |                     |          | 354 | -6.98 | .000 |
| Gender          |                |                     |          | 126 | -2.64 | .667 |
| Age             |                |                     |          | 020 | 43    | .009 |

**Dependent Variable:** Mental Wellbeing

From the table above, all the variables except gender (b = -.02, t (347) = -.43, p =.67) had significant negative 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). Thus, hypotheses 1, 2, and 3 are accepted while hypothesis 4 is rejected.

The adjusted  $R^2$  value at .296 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].

### **Discussion**

The significant negative relationship between academic stress and mental wellbeing implies that as scores on academic stress increase, mental wellbeing decreases. Thus, academic stress 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 impact negatively 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, and 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 and 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. One can infer therefore that no gender is immune to stress and poor mental health.

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 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 undergo counselling 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, being a survey and data only with the use of questionnaires, extraneous variables are not controlled. 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.

### REFERENCES

- Adedipe, N. O. (2013). Strains and stresses in the Nigerian university system: sustainable quality assurance prospects by private universities. Third convocation lecture of the AL-Hikmah University Ilorin. Retrieved from: http://alhikmah.edu.ng/wp-content/uploads/2013/11/strains-and-stresses-in-the-nigerian-univ...
- American Psychology Association (2009). *APA Stress Survey; Children are more Stressed than Parents Realize*. Retrieved from http://www.apapracticecentral.org/update/2009/11-3/stress-survey.aspx
- Awino, J.O. & Agolla, J.E. (2008). A Quest for Sustainable Quality Assurance Measurement for University. Case Study of the University of Botswana, *Educational, Research and Reviews*. 3 (6): 213-218.
- Busari, A.O (2011). Validation of students' academic stress scale (SASS). *European Journal Social Sciences*, 21(1), 94-105.
- Conner, J., Pope, D. & Galloway, M. (2010). Success with Less Stress. *Educational Leadership*, 67 (4), 54-57.
- Dahlin, M., Joneborg, N. & Runeson (2005). *Stress and Depression among Medical Students:* A Cross-Sectional Study. *Medical Education*, 39 (6): 594-604.
- De Anda, D., Baroni., Boskin. L., Buchwald, L., Morgan. J., Siegel. J., & Weiss, R. (2000). Stress, Stressors and Coping among High School Students. *Children and Youth Service Review*, 22, 441-463.
- Downing, J.E., & Miyan, J.A (2000). Neural Immunoregulation: Emerging Roles for Nerves in Immune Homeostasis and Disease. *Immunology Today*, 21, 281-289.

- Erkutlu. H.V., & Chafra. J. (2006). Relationship between Leadership Power Base and Job Stress of Subordinates: Example from Boutique Hotels. *Management Research News*, 29 (5), 285-297.
- Fairbrother. K., & Warn. J., (2003). Workplace Dimension. Stress and Job Satisfaction. *Journal of. Managerial Psychology*, 18(1), 8-21.
- Health & Safety Executive (2014). *Stress*. Retrieved from www.hse.gov.uk>stress>furtheradvise.
- Lanier, C.A, Nicholson, T, & Duncan, D.(2001). Drug use and mental well being among a sample of undergraduate and graduate college students. *Drug Education*, 31(3), 239-48.
- Lohman, B.J., & Jarvis, P.A (2009). Adolescent Stressors, Coping Strategies and Psychological Health Studied in the Family Context. *Journal of Youth and Adolescence*; 29, 15-44.
- Lanier, C.A, Nicholson, T, & Duncan, D.(2001). Drug use and mental well being among a sample of undergraduate and graduate college students. *Journal of Drug Education*, 31 (3), 239-248
- Mostafaei, A. (2012). The relationship between mental health in university students. *Annals of Biological Research*, 3 (7), 3468-3473. Retrieved from http://scholarsresearchlibrary.com/archive.html1(3).
- NDLEA (1992). *Drug Report in Nigeria*: The Epidemiological Data on Drug Use, Lagos. University Press.
- Piko, B. & Fitzpatrick, K.M (2001). Does class matter? SES and Psychosocial health among Hungarian adolescents. *Social Science and Medicine*, *53*, *817-830*
- Schuckit, M.A (1994). Low Level of Response to Alcoholism as a Predictor of Future Alcoholism. *American Journal of Psychiatry*. 151. 184-1
- Selve, H. (1976). The Stress of Life (Rev. ed). NY; Mcgraw-Hill.
- Sinha, R, Fuse T, Aubin, L.R, & O'Malley, S.S (2000). Psychological stress, drug-related cues, and cocaine craving. *Psychopharmacology*, 152, 140-148.
- Skinner, H.A. (1989). Diagnostic Validity of Drug Abuse Screening Test in the Assessment of DSM-III Drug Disorder: *British Journal of Addiction* 84(3); 301-307.
- Substance Abuse and Mental Health Service Administration (2005). Office of Applied Studies. Result from 2004 National Survey on Drug Use and Health: National

- Findings. US Department of Health and Human Service; Rockville, MD; NSDUH Series H-28, DHHS Publication No. SMA 05-4062.
- Taylor, S.E. (2002). *Health Psychology* (5<sup>th</sup> ed). NY: Mcgraw-Hill.
- Tenant. R., Hiller. L., Fishwick. R., Platt. S., Joseph. S., Weich. S., Parkinson. J., Secker. J. & Stewart-Brown. S, (2007). The Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS); Development and UK validation. *Health Quality of Life Outcome*, 5, 63. 422 doi:10.1186/1477-7525-5-63
- Uwaoma, .N.C (2002). Definition of substance abuse; Issues in substance use and abuse in Nigeria. Nigeria: Bill Fred.
- Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS), (2006). NHS Health Scotland, University of Warwick and University of Edinburgh.