

Influence of Demographic variables and Academic Stress on Mental Well-being of Undergraduates in Ondo State

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Abstract

The study assessed the influence of some demographic variables and academic stress on the mental well-being of undergraduates in Ondo State, Nigeria. Descriptive research design was adopted for the study, guided by four null hypotheses. The target population comprised of undergraduates in Ondo State public higher institutions. Two hundred (200) undergraduates from two (2) selected institutions were chosen through stratified random sampling as the sample of the study. Two research instruments utilized in this study were Warwick-Edinburgh Mental Well-being Scale (WEMWBS), and Student Academic Stress Scale (SASS). The reliability of the instruments are .89 and .80 respectively. Data were analysed using descriptive, Pearson product moment correlation and t-test statistics. The hypotheses were tested at 0.05 level of significance. Results showed that a significant negative relationship exists between academic stress and mental well-being. In addition, mental well-being was not influenced by family type but by gender and age. It was recommended that stakeholders in Counselling and Human Development at the tertiary education level should take demographic variables and psychological construct such as academic stress into consideration when proffering solutions to mental well-being challenges among Nigerian undergraduates.

Keywords: Demographic, Academic, Stress, Mental, Well-being, Undergraduates

Introduction

Mental well-being has been a subject of interest to a number of disciplines including Public Health, Psychology, Counselling Psychology, among others. This could be attributed to the fact that health is not complete without mental health. This informs the definition of Health by the World Health Organization (WHO, 2020) as a state of complete physical, mental and social well-being, and not only the absence of disease or infirmity. In specific terms, mental health is a state of well-being in which the individual realizes his or her own potentials; can cope with the everyday stress of life; can work efficiently and is able to make contribution to the development of his or her community (WHO, 2018). From this description, it is evident that inability to handle normal stress of life would definitely hamper mental well-being.

Although a mild level of stress, which is positive and referred to as Eustress, is required to motivate human beings in the course of their daily pursuits, excessive level could be detrimental to one's health. For instance, students in tertiary institutions require this form of moderate stress to be kept on their toes so as to be able to attain their highest potentials in life. However, when learners become overburdened with the challenge of meeting up with expected academic prerequisites, academic stress sets in. Academic stress could be described as the internal and external upsetting experiences which students undergo in the process of meeting up with academic demands in their course of schooling.

According to Aihie and Ohanaka (2019), academic stress refers to the unpleasant situations that occur due to the many demands made on students in the form of examinations, sustaining healthy and academic lives, competing with classmates, meeting the academic expectations of tutors, parents and that of the concerned individual student. Academic stress can also be defined as the outcome of a combination of academic related demands that exceed the adaptive resources available to an individual student (Wilks, 2008). Busari (2012b) enumerated the areas of stress regarding academic work as follows: Frustrations, financial issues, conflicts, pressures, changes and self-expectations. Some components of academic stress could also be: pressure to perform, perceptions of workload and examinations, self-perceptions and time restraints (Bedewy & Gabriel, 2015).

Some studies have revealed that there is a relationship between mental health and academic stress (Glozah, 2013; Bjorkman, 2007; Teh, Archer, Chang & Chen, 2013). Mental well-being has been discovered to be linked with demographic variables. For instance, age had significant negative relationship with mental well-being among undergraduates, according to Sydney-Agbor, Ebeh and Onyeonu (2018). Also, a study carried out by Roslan, Ahmad, Nabilla and Ghiami (2017) among postgraduate students indicated that there were differences found in students' psychological well-being across age groups. With respect to gender, Kantariya (2017) found that there was no significant gender difference on psychological well-being among male and female post-graduate students in India. In addition, another study also revealed that age and gender were not associated with mental well-being (Khumalo, Temane & Wissing, 2012). It is also important to note that there is paucity of literature with respect to family type, that is, living arrangement and mental well-being of undergraduates. However, other variables that have to do with interpersonal relationships within the family have been discovered to be associated with mental well-being of young people. For instance, a study carried out by Isarabhakdi and Pewnil (2014) revealed that family and communication factors significantly affect high school students' mental well-being.

A number of studies have been conducted on perceived academic stress and other variables related to psychological well-being among undergraduates (Aihie & Ohanaka, 2019; Ofori, Addai, Avor & Quaye, 2018; Kio, Omeonu & Agbede, 2015; Fasoro, Oluwadare, Ojo & Oni, 2019). However, only a few researches have been conducted on academic stress and demographic factors as variables that influence

mental well-being among Nigerian students in higher institutions; therefore, this researcher investigated the influence of some demographic factors and academic stress on the mental well-being of undergraduates in Ondo State.

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

Ho1: There is no significant relationship between academic stress and mental well-being of undergraduates.

Ho2: There is no significant influence of family type on the mental well-being of undergraduates.

Ho3: There is no significant influence of gender on the mental well-being of undergraduates.

Ho4: There is no significant influence of age on the mental well-being of undergraduates.

Methodology

Descriptive research design of the ex-post facto type was adopted for the study. This design was used to investigate the influence of some selected demographic variables and academic stress on the mental well-being of undergraduates in higher institutions in Ondo State, Nigeria. The population of the study included undergraduates in Ondo State public higher institutions. Simple random sampling technique was used to select two (2) out of the five (5) public higher institutions offering degree programmes. The two institutions used were Adeyemi College of Education, Ondo and Federal University of Science and Technology, Akure. Stratified random sampling method was used to select one hundred (100) students from each institution. A total of one hundred and twelve (112) males and eighty eight females were chosen from both schools.

Two research instruments were utilized in the study namely: Warwick–Edinburgh Mental Well-being Scale (WEMWBS) with a reliability estimate of 0.89 (NHS Health Scotland, University of Warwick and University of Edinburgh, 2006; Tennant, et. al, 2007) and Student Academic Stress Scale (SASS) with .80 as the established reliability coefficient (Busari, 2012a). WEMWBS is a 14-item scale in a 5-point Likert type response format (1=None of the time; 2=Rarely; 3=Some of the time; 4=Often; 5=All of the time). It was adopted with a re-established reliability of .77 using Cronbach alpha statistics. Also, SASS contains 130 items in a 5-point Likert type response format (1= Very much unlike me; 2=Unlike me; 3=Sometimes like me; 4=Like me; and 5 = Very much like me). The SASS measures academic stressors and reactions to stressors. In the academic stressors section, six categories of academic stressors were assessed; this includes frustrations, financial, conflicts, pressures, changes, and self-expectation. It was adapted making use of five (5) items from each sub-section of the academic stressor section, making a total of thirty (30) items. In addition SASS reliability was re-established and returned a Cronbach alpha value of .85. Data generated from this study were analyzed using descriptive statistics, Pearson product moment correlation and t-test statistics.

Presentation of results

Demographic information of respondents

Table 1: Distribution of Students by Gender

Gender	Frequency	Percentage
Male	112	56.0
Female	88	44.0
Total	200	100.0

Table 1 shows that two hundred (200) students from higher institutions were selected as sample for this study. Out of these 200 students, 112 (56%) were males while the remaining 88 (44.0%) were females.

Table 2: Age Distribution of the Students

Age	Frequency	Percentage
15-20years	66	33.0
21- 25years	105	52.0
26-30years	26	13.0
31 years and above	3	1.5
Total	200	100.0

Table 2 shows the age distribution of the respondents. The table shows that 66 (33%) of the students were between the ages of 15 and 20 years, 105 (52%) were between the ages of 21 and 25 years, 26 (13%) were between the ages of 26 and 30 years, while the remaining 3 (1.5%) were of ages 31 years and above.

Table 3: Distribution of Students by Family Type

Family Type	Frequency	Percentage
Intact	172	86.0
Non-intact	28	14.0
Total	200	100.0

Table 3 shows that 172 (86%) of the students were from intact families while the remaining 28 (14%) were from non-intact families.

Ho1: There is no significant relationship between academic stress and mental well-being of undergraduates.

Table 4: Summary of Pearson Product Moment Correlation showing relationship between Academic Stress and Mental Well-being of Undergraduates

Variable	Mean	Std. Deviation	N	R	Sig	Remark
Academic Stress	90.81	16.07	200	-.374	.000	Significant
Mental Well-being	49.21	7.05				

Table 4 shows that there is significant negative relationship between academic stress and mental well-being of the students (N = 200; r = -.374; p<0.05). Hence, null hypothesis one is rejected.

Ho2: There is no significant influence of family type on the mental well-being of undergraduates.

Table 5: Summary of t-test showing influence of Family Type on Undergraduates' Mental Well-being

Family Type	N	Mean	SD	df	t	Sig.	Remark
Intact	172	49.20	7.15	198	-.057	.955	Not Significant
Non-Intact	28	49.28	6.48				

Table 5 shows that the mean score of students from intact family is 49.20 while that of students from non-intact family is 49.28. The values of the mean scores do not reveal an appreciable difference. This was however subjected to statistical test, which indicated that there is no significant influence of family type on the mental well-being of students (df =198; t = -.057; p > 0.05). Hence, null hypothesis two is accepted.

Ho3: There is no significant influence of gender on the mental well-being of undergraduates.

Table 6: Summary of t-test showing influence of Gender on Undergraduates' Mental Well-being

Gender	N	Mean	SD	df	t	Sig.	Remark
Male	112	48.30	7.33	198	-2.079	.039	Significant
Female	88	50.37	6.52				

Table 6 shows that the mean score of male students is 48.30 while that of female students is 50.37. The testing of the hypothesis indicated that there is a significant

influence of gender on students' mental well-being (df =198; t = -2.079; p < 0.05). Hence, null hypothesis three is not accepted.

Ho4: There is no significant influence of age on the mental well-being of undergraduates.

Table 7: Summary of One-Way Analysis of Variance showing the influence of Age on Undergraduates' Mental Well-being

Age	N	Mean	SD
15-20 years	66	49.60	6.49
21-25 years	105	49.42	7.16
26-30 years	26	48.76	7.36
31 years and above	3	37.00	.00
Total	200	49.21	7.05

Analysis of Variance						
Model	Sum of Squares	df	Mean Square	F	Sig.	Remark
Between Groups	36.809	3	155.889			
Within Groups	467.668	196	48.123	3.239	.023	Significant
Total	9899.755	199				

Table 7 shows the influence of age on the mental well-being of students. The table shows that the mean score on the mental well-being of the students between age 15 to 20 years is 49.60, those between 21 to 25 years of age had mean score of 49.42, those with 26 to 30 years of age had mean score of 48.76 while the students with age 31 years and above had mean score of 37.00. The ANOVA table shows that there is significant influence of age on the students' mental well-being ($F_{(3, 196)} = 3.239$; $p < 0.05$). Hence, null hypothesis 4 is rejected.

Discussion of findings

The result of hypothesis one revealed that there is a negative relationship between academic stress and mental well-being. This implies that as the level of academic stress increases, expected indices of mental well-being depreciates, and vice versa, among undergraduates. The implication of this outcome explains the fact that a high level of academic stress being presented as susceptibility to academic stressors could disrupt the overall healthy state of undergraduates thereby indirectly hampering academic performance. This is in tandem with the finding of Teh, et al (2013) which indicated that perceived stress was negatively associated with perceived health among undergraduates.

The outcome of hypothesis two showed that there is no significant influence of family type on the mental well-being of undergraduates. In this context, this depicts the fact that family type, that is, intact (both parents are living together) or non-intact (both parents are not living together), does not have a significant influence on the overall mental well-being of undergraduate students. This shows that there is no disparity in the level of mental well-being based on undergraduates' family living arrangement. This finding is in contrast with the outcome of the study of Isarabhakdi and Pewnil (2014) which states that family and communication factors significantly affect high school students' mental well-being.

The result of hypothesis three revealed that gender had significant influence on undergraduate students' mental well-being. This is evident in the mean scores of both male and female students; that of female undergraduates being higher than their male counterparts. This shows that female undergraduates are more likely to be able to cope with the challenges of life than males. This is in contrast to the finding of Sydney-Agbor, Ebeh and Onyeonu (2018) which shows that mental well-being did not differ across gender among undergraduates.

The outcome of hypothesis four showed that age had significant influence on the mental well-being of undergraduates. It was observed that overall mental well-being of students decrease with increase in age as depicted by the mean scores of the different age groups. This could be attributed to the fact that on a general note, young people have lesser level of responsibilities compared to older adults in terms of other commitments like marriage and family life, finance and so on. This finding is in consonance with the discovery of Sydney-Agbor, Ebeh and Onyeonu (2018) which revealed that age had significant inverse relationship with mental well-being among undergraduates.

Conclusion

The study revealed that academic stress had a negative relationship with mental well-being while mental well-being was not influenced by family type but by gender and age among undergraduates.

Recommendations

Based on the findings of the study, stakeholders in Counselling and Human Development at the tertiary education level should take demographic variables and psychological construct such as academic stress into consideration when proffering solutions to mental well-being challenges among Nigerian undergraduates.

References

- Aihie, O. N. & Ohanaka, B. I. (2019). Perceived Academic Stress among undergraduate students in a Nigerian University. *Journal of Educational and Social Research*, 9(2), 56-66.
- Bedewy, D. & Gabriel, A. (2015). Examining perceptions of academic stress and its sources among University Students: The perception of Academic Stress Scale. *Health Psychology Open*, July-December, 1-9.

- Bjorkman, S. M. (2007). Relationships among academic stress, social support and internalizing and externalizing behaviour in adolescence. Unpublished Ph.D. dissertation, Northern Illinois University, United States.
- Busari, A. O. (2012a). *Student Academic Stress Scale (SASS)*. Ibadan: Gloryland Publishing Company.
- Busari, A. O. (2012b). *Manual for student Academic Stress Scale (SASS)*.
- Fasoro, A. A., Oluwadare, T., Ojo, T. F. & Oni, I. O. (2019). Perceived stress and stressors among first year undergraduate students at a private medical school in Nigeria. *Journal of Taibah University Medical Sciences*, 14(5), 425-430.
- Glozah, F. N. (2013). Effects of academic stress and perceived social support on the psychological well-being of adolescents in Ghana. *Open Journal of Medical Psychology*, 2, 143-150.
- Isarabhakdi, P. & Pewnil, T. (2014). Engagement with family, peers, and internet use and its effect on mental well-being among high school students in Kanchanaburi Province, Thailand. *International Journal of Adolescence and Youth*, 2(1), 15-26.
- Kantariya, A. S. (2017). Impact of gender on psychological well-being among post-graduate students. *Psychology and Behavioral Science International Journal*, 2(1).
DOI:10.19080/PBSIJ.2016.02.555578.
- Khumalo, I., Temane, Q. M. & Wissing, M. P. (2012). Sociodemographic variables, general psychological well-being and the mental health continuum in an African context. *Social Indicators Research*, 105(3), 419-442.
- Kio, J. O., Omeonu, P. E. & Agbede, C. O. (2015). Assessment of stress levels among undergraduates in Nigeria: Implication for mental health policy. *Journal of Nursing and Health Science*, 4(1), 18-23.
- NHS Health Scotland, University of Warwick and University of Edinburgh (2006). *Warwick Edinburgh Mental Well-being Scale (WEMWBS)*.
- Ofori, I. N., Addai, P., Avor, J. & Quaye, M. G. (2018). Too much academic stress: Implications on interpersonal relationships and psychological well-being among final year University of Ghana Students. *Asian Journal of Education and Social Studies*, 2(3), 1-7.
- Roslan, S., Ahmad, N., Nabilla, N. & Ghiami, Z. (2017). Psychological well-being among postgraduate students. *Acta Medica Bulgarica*, XLIV(1), 35-41.
- Sydney-Agbor, N. Ebeh, R. & Onyeanu, M. (2018). Predictors of mental well-being among undergraduates in Eastern Nigeria: A function of academic stress, substance abuse and age. *African Journal of Social and Behavioural Sciences*, 8(2), 142-150.
- Teh, C. H., Archer, J. A., Chang, W. & Chen, S. A. (2013). Mental well-being mediates the relationships between perceived stress and perceived health. *Stress and Health*, 31, 71-77.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J. & Stewart-Brown, S. (2007). Warwick–Edinburgh Mental Well-being Scale (WEMWBS): Development and UK validation. *Health and Quality of Life Outcomes*, 5(63). doi:10.1186/1477-7525-5-63.

- Wilks, S. E. (2008). Resilience and academic stress: The moderating impact of social support among Social Work students. *Advances in Social Work*, 9(2), 106-125.
- World Health Organization (WHO) (2018). Mental health: Strengthening our response. Accessed 9th May, 2020 from www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response.
- World Health Organization (WHO) (2020). Frequently asked questions. Accessed 9th May, 2020 from www.who.int/about/who-we-are/frequently-asked-questions.