



Socio-economic Status as Correlate of Health Status of Undergraduates in Public Universities, Rivers State, Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This study examined socio-economic status as correlate of health status of undergraduate students in public universities, Rivers State. A descriptive research design was adopted with a population which consisted of 64,691 undergraduates in public universities, Rivers State, Nigeria. A sample size of 1,194 was selected using a multi-stage sampling procedure. The data collection instrument was a structured questionnaire with a reliability coefficient of 0.82. Data analysis was carried out using regression statistics at 0.05 alpha level. The result indicated that a significant positive relationship was found between parent financial status (monthly income) and mental health status ($r = 0.13$, $R^2 = 0.019$, $p < 0.05$), physical ($r = 0.82$, $R^2 = 0.750$, $p < 0.05$) and social health status ($r = 0.86$, $R^2 = 0.75$, $p < 0.05$). Furthermore, a significant positive relationship was found between parent employment status and mental health status ($r = 0.94$, $R^2 = 0.883$, $p < 0.05$), physical health status ($r = 0.93$, $R^2 = 0.866$, $p < 0.05$) and social health status ($r = 0.91$, $R^2 = 0.825$, $p < 0.05$). It was concluded

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that socio-economic status of parents such as monthly income, and employment status of parents contributed less than 50% to health status of undergraduates in public universities in Rivers State. It was recommended that, the government should establish poverty alleviation programmes for parents/guardians whose children/wards are in university to help any financial stress which may contribute or influence the health status of the students.

Keywords: Health; socio-economic; undergraduates; health status; social health; mental health; social well-being; stress.

1. INTRODUCTION

“Living a healthy life is key for young people in tertiary institutions as it is linked to their academic performance. Health, according to World Health Organization is the state of complete physical, mental and social well-being and not merely the absence of diseases and infirmity” [1]. In a similar opinion, Bhugra et al. (2018) emphasized that, “health is a continuum that focuses on the relationship between health, stress and coping, that is, health is more than the absence of illness and exists in domains such as social, mental health and physical health. Physical health is that aspect of health that affects the body mainly”. According to Matingwina [2], “physical health problems such as vision and oral health problems, asthma, teen pregnancy, malnutrition, obesity, unsafe sexual activity, unhealthy eating, physical inactivity and substance use are associated with low scholastic performance. Considering that physical health problems have a significant influence on the overall performance of students, there is a need for young people to pay attention to their health adequately, not only their physical health but also their social and mental health”.

The mental health status of young people, specifically those in the tertiary institutions, must not be neglected as it affects how they think, feel and act. Smith (2014) noted that, mental health is that aspect of health that affects emotions, thoughts or behaviour. It is a person’s level of psychological well-being (Alyson, 2014). The mental health status of young people influences everything about them including their physical and social health. For instance, a mentally unstable individual cannot have a healthy relation or interaction with others as well as engage in healthy practices that promotes their physical health. Students in tertiary institutions are saddled with academic activities that requires optimum stability in their mental health to enable them achieve their aim thus, must be mentally healthy. According to the World Health Organization [3], the mental health of young

people could be measured by their proficiency to realize their own abilities, cope with the normal stresses of life, work productively and fruitfully, and make meaningful contribution to the society, it is more than the mere lack of mental disorders. The mental well-being of young people could be express in their social life.

The health status of young people could also be impacted by their socio-economic status. Socio-economic status refers to both the social class and economic status of individuals. They are the economic and social conditions that influence individual and group differences in health status. In the words of Lumen (2021), socioeconomic status (SES) is the greatest determinant of an individual’s health outcome and they are risk factors found in one’s living and working conditions (including the income, wealth, occupation, and educational status), rather than individual factors (such as behavioral risk factors or genetics). “Socio-economic determinants can be used to predict one’s risk of contracting a disease or sustaining an injury, and can also indicate how vulnerable one is to the consequences of a disease or injury. Individuals of lower socioeconomic status have lower levels of overall health, less insurance coverage, and less access to adequate healthcare than those of higher SES” (Lumen, 2021). However, socio-economic status in this study included family income, occupation, educational status and religious affiliation. The Boundless Sociology [4] described “religious affiliation as the measure of which religious denomination a person identifies with or practices. Religious affiliation influences several life decision of an individual which in turn determines their health. However, the relationship between religion and health status is much more complex than expected”. According to Srikanthan and Reid [5], “when a person’s most fundamental assumptions of a faith are dissimilar to those of the health care provider, medical recommendations may be made that are not in keeping with their religious values, in which case they may not adhere thereby worsening their health status”.

Another factor that could be correlated with health status is income level. Ibrahim et al. [6] stated that, "compared with young people from families with higher income, those from families with lower income are more likely to generate and express negative affectivity and suffer from emotional disorders". This could be explained by the assertion of Kim and Davis [7] that, "young people from inadequate family environments were more frequently exposed to overcrowding, noise and adverse life events". Thus, Graves and Nowakowski [8] speculated that, "young people from inadequate family environments characterized by these adverse factors are exposed to a greater risk of multifarious emotional problems in adulthood. The income status of individuals defines their environment and location which could either promote or deter their health. For instance, those with lower income status tend to be more jam-packed in an apartment which is unfavourable to health. In most cases, the income status of an individual is tied to the type of job they do or their occupation which is a vital socio-economic correlate". Amawulu and Prosper [9] reported that, "students whose parents were civil servant showed more symptoms of both mental and infectious health while lower symptoms were observed among students whose parents were clergymen. The report further showed that, disparity exist between parents' income level, residential location and students' health challenges. This could be due to the fact that socio-economic status is an enabling factor for living a healthy life. Also, income status determines whether an individual attain tertiary level of education"

Rivers State is one of the hubs of educational institutions with fast growing infrastructural and technological advancement in the different educational institutions especially, the tertiary institutions, majority of which the students are young people. Use of social media among youths in tertiary institutions could influence their health status as it could lead to loss of concentration, stress and unhealthy relationships. "However, most studies point to many negative factors associated with social media use for young people. Adverse effects include increased narcissism, superficial connections, increased tension, anxiety, and sleep disorders, especially if the platforms are used for excessive amounts of time" [10] Turkle [11] study showed that "social media lead to the formation of new, unhealthy relationships between parents, children, friends, and other participants in communication". "The social situation of development has a significant

impact on self-awareness and determines the transition of the psyche and the crisis of youthfulness. In friendly relations with the development of technology, the share of online communication is growing" (Koenig et. al., 2020). On the other hand, young people's health status can be linked to their socio-economic status however, this link need to be established in order to inform better choices and enhance efforts geared towards promoting the health status of young people. Thus, this study was carried out to investigate social media as correlates of health status of undergraduate students in tertiary institutions in Rivers State. The study attempted to provide answers to the following questions:

1. What is the relationship between parent financial status (monthly income) and mental health status of undergraduate students in public universities, Rivers State?
2. What is the relationship between parent financial status (monthly income) and physical health status of undergraduate students in public universities, Rivers State?
3. What is the relationship between parent financial status (monthly income) and social health status of undergraduate students in public universities, Rivers State?
4. What is the relationship between parent employment and mental health status of undergraduate students in public universities, Rivers State?
5. What is the relationship between parent employment and physical health status of undergraduate students in public universities, Rivers State?
6. What is the relationship between parent employment and social health status of undergraduate students in in public universities, Rivers State?

The following hypotheses were stated to guide the study and will be tested at 0.05 alpha level:

1. There is no significant relationship between parent financial status (monthly income) and mental health status of undergraduate students in public universities, Rivers State.
2. There is no significant relationship between parent financial status (monthly income) and physical health status of undergraduate students in public universities, Rivers State.

3. There is no significant relationship between parent financial status (monthly income) and social health status of undergraduate students in public universities, Rivers State.
4. There is no significant relationship between parent employment status and mental health status of undergraduate students in public universities, Rivers State.
5. There is no significant relationship between parent employment status and physical health status of undergraduate students in public universities, Rivers State.
6. There is no significant relationship between parent employment status and social health status of undergraduate students in public universities, Rivers State.

2. METHODOLOGY

A descriptive research design was adopted for this study with a population which consisted of 64,691 undergraduates in Rivers State (Academic Planning Units of Public Universities, Rivers State, 2020). The sample size for this study is 1,194. A multistage sampling procedure was used to select the respondents for the study. At stage 1: A simple random sampling technique was used to select four faculties each, from the three Universities. At stage two: the proportionate stratified sampling technique was used to determine the number of students to be selected from each of the school and apportion the required sample size for each department. To ensure the largest departments contributed the most, a list of the students from each department was obtained from the respective course representatives in each level of study and

sample size distributed proportionately. At stage 3: the respondents were selected through simple random sampling. The data collection instrument was a structured questionnaire with a reliability coefficient of 0.82. Data collected were analyzed with the aid of the Statistical Product for Service Solution (SPSS V-23) using statistical tools such as linear regression at 0.05 level of significance.

3. RESULTS

The results of this study are shown below in Tables:

Table 1 presented the regression analysis on significant relationship between parent financial status (monthly income) and mental health status of undergraduate students. The findings of the study revealed that there was a significant relationship between parent financial status (monthly income) and mental health status of undergraduate students [$f(4,1182) = 22.55, p < 0.05$]. Therefore, the null hypothesis which stated that there was no significant relationship parent financial status (monthly income) and mental health status of undergraduate students in public universities, Rivers State was rejected.

Table 2 presented the regression analysis on significant relationship between parent financial status (monthly income) and physical health status of undergraduate students. The findings of the study revealed that there was a significant relationship between parent financial status (monthly income) and physical health status of undergraduate students [$f(4,1182) = 1535.96, p < 0.05$]. Therefore, the null hypothesis which stated that there was no significant relationship parent financial status (monthly income) and physical health status of undergraduate students in public universities, Rivers State was rejected.

Table 1. Regression analysis on significant relationship between monthly income and mental health

Model		Sum of Squares	Df	Mean Square	F	Sig.	Decision
1	Regression	13.151	1	13.151	22.55	.00*	Rejected
	Residual	668.824	1147	.583			
	Total	681.975	1148				

*Significant, $p < 0.05$. $r = 0.13, R^2 = 0.019$

Table 2. Regression analysis on significant relationship between monthly income and physical health

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	6773.95	4	6773.95	1535.96	.00*	Rejected
	Residual	3254.75	1182	4.41			
	Total	10028.70	1186				

*Significant, $p < 0.05$. $r = 0.82, R^2 = 0.750$

Table 3. Regression analysis on significant relationship between monthly income and social health

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	7543.35	4	7543.35	2214.35	.00*	Rejected
	Residual	2514.05	1182	3.41			
Total		10057.40	1186				

*Significant, $p < 0.05$. $r = 0.86$, $R^2 = 0.75$

Table 3 presented the regression analysis on significant relationship between parent financial status (monthly income) and social health status of undergraduate students. The findings of the study revealed that there was a significant relationship between parent financial status (monthly income) and social health status of undergraduate students [$f(4,1182) = 2214.35$, $p < 0.05$]. Therefore, the null hypothesis which stated that there was no significant relationship parent financial status (monthly income) and social health status of undergraduate students in public universities, Rivers State was rejected.

Table 4 presented the regression analysis on significant relationship between parent employment status and mental health status of undergraduate students. The findings of the study revealed that there was a significant relationship between parent employment status and mental health status of undergraduate students [$f(4,1182) = 5588.49$, $p < 0.05$]. Therefore, the null hypothesis which stated that there was no significant relationship parent employment status and mental health status of undergraduate students in public universities, Rivers State was rejected.

Table 4. Regression analysis on significant relationship between parent employment status and mental health

Model		Sum of Squares	Df	Mean Square	F	Sig.	Decision
1	Regression	8960.30	4	8960.30	5588.49	.00*	Rejected
	Residual	1189.68	1182	1.60			
Total		10149.98	1186				

*Significant, $p < 0.05$. $r = 0.94$, $R^2 = 0.883$

Table 5. Regression analysis on significant relationship between parent employment status and physical health

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	8812.52	4	8812.52	4792.31	.00*	Rejected
	Residual	1364.45	1182	1.83			
Total		10176.97	1186				

*Significant, $p < 0.05$. $r = 0.93$, $R^2 = 0.866$

Table 6. Regression analysis on significant relationship between parent employment status and social health

Model		Sum of Squares	df	Mean Square	F	Sig.	Decision
1	Regression	8571.206	4	8571.206	3503.41	.00*	Rejected
	Residual	1815.325	1182	2.447			
Total		10386.531 ^d	1186				

*Significant, $p < 0.05$. $r = 0.91$, $R^2 = 0.825$

4. DISCUSSION OF FINDINGS

The result indicated that there was a significant positive relationship between parent financial status (monthly income) and mental health status ($r = 0.13$, $p < 0.05$) and parent financial status contributed 1.9% of the variance in the mental health of students ($R^2 = 0.019$). The finding of this study was anticipated given the high cost of living in Nigeria where the study was conducted. Money is needed for proper nutrition which enhances mental reasoning. By implication, undergraduates whose parents' financial status is stable might never disturb themselves thinking about how to survive, of which such thoughts are not healthy for mental health. The finding of this study is akin to that of Mathers et al. [12] on electronic media use and adolescent well-being in Australia which showed a significant relationship between socio-economic status and health status. The finding of this study corroborates that of Adedeji et al. (2021) whose study on study on internet access and use of social media among adolescents in selected secondary schools in Ile-Ife, Nigeria showed that a positive relationship between financial status and health status. The finding of this study is in line with that of Ardington and Case [13] carried out a study on the interactions between mental health and socioeconomic status in the South African which showed that household expenditure per member and the number of assets owned by the household significantly correlates with health status. The finding of this study corroborates that of Navarro-Carrillonm et al. [14] whose study showed significant relationship between socioeconomic status such as income, and psychological well-being. The finding of this study corroborates that of Roshan et al. [15] whose study on mental health and socioeconomic status among youths in Chandigarh showed statistically significant relationship between socio-economic status and mental health status as respondents with high income family possess good mental health as compared to the low income participants. The finding of this study gives credence to Oyeboade [16] whose study on socio-economic status and use of social media by undergraduate students in university of Ibadan, Ibadan, Oyo state, Nigeria showed that, socio-economic status has significant relationship with use of social media ($X^2 = 9.797$, $p < 0.05$) which influences health status of the university students. This result supports that of Nagasu and Yamamoto [17] whose study on the impact of socioeconomic- and lifestyle-related risk factors on poor mental

health conditions in Japan revealed that there was a statistically significant relationship between low household income and mental health condition. The similarity between the previous study and the present one might be due to the homogeneity of the study population.

The finding of this study is in tandem with that of Chiranjit et al. [18] whose study on in West Bengal, India showed that there is no significant relationship between socioeconomic status and wellbeing. The result of the study is in akin with that of Mbada et al. [19] whose study conducted in Nigeria showed a high correlation ($r = 0.951$, $p < 0.01$) between socio-economic status and health status. The similarity in the study context could be implicated for the similarities found between the previous studies and the present one. However, the finding of this study negates that of Jian and Liuna [20] whose study in China revealed that, socio-economic status had no significant impact on people's psychological health ($r = 0.12$, $p > 0.01$). The finding of this study showed that there was a significant positive relationship between parent financial status (monthly income) and physical health status ($r = 0.82$, $p < 0.05$) and parent financial status contributed 67.5% of the variance in the physical health of students ($R^2 = 0.675$). The finding of this study gives credence to that of Jian and Liuna [20] whose study on the effects of socioeconomic status on physical and psychological health in China revealed that, socio-economic status had a significant impact on people's physical health ($r = 0.27$, $p < 0.01$). The similarity between the previous study and the present one might be due to the homogeneity of the study population.

The finding of the study showed that there was a significant positive relationship between parent employment status and mental health status ($r = 0.94$, $p < 0.05$) and parent employment status contributed 88.3% of the variance in the mental health of undergraduate students ($R^2 = 0.883$). This result supports that of Nagasu and Yamamoto [17] whose study on the impact of socioeconomic- and lifestyle-related risk factors on poor mental health conditions in Japan revealed that there was a statistically significant relationship between unemployment, and mental health condition. The finding of this study corroborates that of Navarro-Carrillonm et al. [14] whose study showed significant relationship between socioeconomic status such as occupation and psychological well-being. The finding of this study corroborates that of Adedeji et al. (2021) whose study on study on internet

access and use of social media among adolescents in selected secondary schools in Ile-Ife, Nigeria showed that a positive relationship between employment status and health status. The finding of this study is in consonance with that of Paakkari et al. [21] whose study on social media use and health showed that higher parental monitoring which could be due to the employment status of respondents ($\chi^2(4) = 93.30$; <0.001) and was statistically significantly associated with health status. The finding of this study corroborates that of Roshan et al. [15] whose study on mental health and socioeconomic status among youths in Chandigarh showed statistically significant relationship between socio-economic status and mental health status as respondents with high income family possess good mental health as compared to the low income participants. The finding of this study gives credence to Oyeboade [16] whose study on socio-economic status and use of social media by undergraduate students in university of Ibadan, Ibadan, Oyo state, Nigeria showed that, socio-economic status has significant relationship with use of social media (i.e. $X^2 = 9.797$, $p < 0.05$) which influences health status of the university students. The result of the study is in akin with that of Mbada et al. [19] whose study conducted in Nigeria showed a high correlation ($r = 0.951$, $p < 0.01$) between socio-economic status and health status. The finding of this study corroborates that of Navarro-Carrillonm et al. [14] whose study showed significant relationship between socioeconomic status and psychological well-being. The similarity between the previous study and the present one might be due to the homogeneity of the study population [22-25]

5. CONCLUSION

It was concluded that other than the study variables, some other variables could strongly contribute to the health status of undergraduates in public university which was not this study's focus. That socio-economic status of parents such as monthly income, and employment status of parents contributed less than 50% to health status of undergraduates in public universities in Rivers State. There is thus an urgent need to explore on other factors that could contribute to the health status of the undergraduates.

6. RECOMMENDATIONS

The following recommendations were made based on the findings of the study:

1. The government should establish poverty alleviation programmes for parents/guardians whose children/wards are in university to help any financial stress which may contribute or influence the health status of the students.
2. The State government should create more employment opportunities, so that unemployed parents can be employed to be able to take care of their children adequately which subsequently influenced the health status of the students.
3. The student affairs unit of the public universities should seek to appreciate provide a functional healthcare services department with a very minimal charges, affordable by all studies.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. World Health Organization. Social determinants of mental health. WHO; 2014.
2. Matingwina T. Health, academic achievement and school-based interventions, health and academic achievement, blandina bernal-morales, intechopen; 2018. Available:<https://www.intechopen.com/chapters/62994>
3. World Health Organization. World Health Statistics. WHO; 2020.
4. Boundless Sociology *Religious* affiliation and health status. Boundless Sociology; 2020.
5. Srikanthan A, Reid RL. Religious and cultural influences on contraception. *Journal of Obstetrics and Gynecology*. 2008;30(2):129–137.
6. Ibrahim A, Kelly S, Glazebrook C. Socioeconomic status and the risk of depression among UK higher education students. *Social Psychiatry and Psychiatric Epidemiology*. 2013;48(9):1491–1501.

7. Kim HK, Davis KE. Toward a comprehensive theory of problematic Internet use: Evaluating the role of self-esteem, anxiety, flow, and the self-rated importance of Internet activities. *Computers in Human Behavior*. 2009; 25(2):490 – 500.
8. Graves KY, Nowakowski ACH. (2017). Childhood socioeconomic status and stress in late adulthood: A longitudinal approach to measuring allostatic load. *Global Pediatric Health*. Available:https://doi.org/10.1177/2333794X17744950
9. Amawulu E, Prosper KE. Mental health status of students attending tertiary institutions in Bayelsa State, Nigeria. *Journal of Public Health and Epidemiology*. 2018;10(10):363-369.
10. Wilson RE, Gosling SD, Graham LT. A review of Facebook research in the social sciences. *Perspectives Psychology and Science*. 2012;7(3):203-220.
11. Turkle S. *Alone together: Why we expect more from technology and less from each other*. Basic Books; 2011.
12. Mathers M, Canterford L, Olds T, Hesketh K, Ridley K, Wake M. Electronic media use and adolescent health and well-being: Cross-sectional community study. *Academic Pediatrics Association*. 2009;9(5):307- 315.
13. Ardington C, Case A. Interactions between mental health and socioeconomic status in the South African national income dynamics study. *Journal for Studies in Economics & Econometrics*. 2010;34(3): 69-85.
14. Navarro-Carrillo G, Alonso-Ferres M, Moya M, Valor-Segura I. Socioeconomic status and psychological well-being: Revisiting the role of subjective socioeconomic status. *Frontier in Psychology*. 2020;11:1-15:1303. DOI:10.3389/fpsyg.2020.01303
15. Roshan L, Shivani S, Rajesh K. A study of mental health and socioeconomic status among youth. *Research Journal of Social Science & Management*. 2013;3(6):65-72.
16. Oyeboade JA. Socio-economic status, peer pressure and use of social media by undergraduate students in university of Ibadan, Ibadan, Oyo state, Nigeria. *Library Philosophy & Practice*, (e-Journal); 2017. Available:http://digitalcommons.unl.edu/libphilprac/1495
17. Nagasu M, Yamamoto I. Impact of socioeconomic- and lifestyle-related risk factors on poor mental health conditions: A nationwide longitudinal 5-wave panel study in Japan. *Plos One*. 2020;15(10):e0240240.
18. Chiranjit H, Ganesh P, Arumay J, Asish P. A study on the relationship of socioeconomic status with wellbeing of different professional groups. *Journal of Research in Humanities & Social Science*. 2020;8(11):1-8.
19. Mbada CE, Adedoyin RA, Odejide AS. Relationship between socioeconomic status and body mass index among adult Nigerians. *African Journal of Physiotherapy & Rehabilitation Sciences*. 2009;1(1):1-6.
20. Jian W, Liuna G. Effects of socioeconomic status on physical and psychological health: Lifestyle as a mediator. *International Journal of Environmental Research & Public Health*. 2019;16(281): 1-9.
21. Paakkari L, Tynjälä J, Lahti H, Ojala K, Lyyra N. Problematic Social Media Use and Health Among Adolescents. *International Journal of Environmental Research & Public Health*. 2021; 18(1885):1-11.
22. Bhugra D, Till A, Sartorius N. *What is mental health*; 2013. Available:http://journals.sagepub.com/doi/full/10.1177/0020764012463315
23. Koenig HG, King DE, Carson VB. *Handbook of religion and health: A history of religion, medicine, and healthcare* (2nd ed.). Oxford University Press; 2012).
24. Pew Research Center *Social media use may harm teens' mental health by disrupting positive activities, study says*. PRC; 2018.
25. Smith N, Gavin LE. Impact of educational intervention on contraceptive knowledge and decision making. *American Journal of preventive Medicine*. 2015;49(201):46-56.

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