Ogbolu, C.N.,Okonkwo, C. B.,Akinloju, A. R.,Agofure, O.,Iyawa, J. (2024)

ASSESSMENT OF SOCIAL FACTORS AS PREDICTORS OF STUDENTS' ACADEMIC PERFORMANCE IN A SOUTH-SOUTH TERTIARY INSTITUTION, NIGERIA: A CROSS-SECTIONAL STUDY

Ogbolu Christabel Nneka
Department of Public and Community Health,
College of Medical and Health Sciences,
Novena University, Ogume, Delta State, Nigeria.
christabelnnekaogbolu@gmail.com, 08166069679

And
Okonkwo Chukwuemeka Browne
School of Medicine and Surgery, Novena University,
Ogume, Delta State, Nigeria.
okonkwobrowne@yahoo.com, 08039350000

And
Adeloju Akinola Richard
School of Dentistry, Novena University,
Ogume, Delta State, Nigeria.
adulojuakin@gmail.com, 08056121170

And
Agofure Otovwe
Department of Public Health, Faculty of Health Sciences,
Achievers University, Owo, Ondo State, Nigeria.
agofureotovwe@yahoo.com. 07030839248

And
Iyawa, Justice
Department of Public Health, Novena University,
Ogume, Delta State, Nigeria.
justiceiyawa@gmail.com 0806241439

Abstract
The study aimed at assessing social factors as predictors of students' academic performance in a South-South tertiary institution in Nigeria, using a cross-sectional design. Two research questions and three hypotheses guided the study. The population comprised all students of the institution in Delta State, Nigeria, and a sample size of 358 students was selected through stratified random sampling across four faculties. A structured questionnaire, validated by experts and achieving a reliability coefficient of 0.84, was used for data collection. Data analysis involved descriptive statistics, including frequencies and percentages, and inferential statistics, such as logistic regression and chi-square tests. Findings indicated that 91% of respondents had a CGPA $\geq$ 2.75, reflecting good academic performance, while 9% fell below this benchmark. Logistic regression revealed that factors such as school culture (OR=1.061, P=0.658) and religion (OR=1.002, P=0.991) were not significant predictors of academic performance. However, parental employment status emerged as a significant factor influencing students' academic success (P<0.05). Demographic variables such as age, gender, and family size showed no significant influence on academic outcomes (P>0.05). The study concluded that parental employment status is a critical predictor of students' academic performance, while institutional and demographic factors had minimal impact. Recommendations include implementing support programs for students from disadvantaged

socioeconomic backgrounds and fostering a conducive learning environment. Further research was suggested to explore other social factors that may affect academic performance.

Introduction

Academic achievement is impacted by numerous factors, including parental support, study habits, and GPA. Recent studies stress the importance of engagement, past grades, and extracurricular activities in determining students' success (Suleiman *et al.,* 2024; Kocsis & Molnár, 2024). However, a learner's academic performance is greatly influenced by their family background, educational environment, and socioeconomic status. Additionally, the motivation of students and the relationships that form between teachers and students are critical factors in achieving academic goals (Islam & Tasnim, 2021).

A study conducted at a private university by Banik and Kumar (2019) summarized the following: academic performance of university students is influenced by a variety of institutional and socioeconomic factors, including classroom performance, age, gender, parental education, and income level; unique variables include cerebral skill, exertion, motivation, and dedication to learn; and performance in the classroom and classroom environment. Furthermore, a majority of institutions throughout the globe use candidates with outstanding academic records as an indicator of performance for admission to master's and doctorate programs, according to a survey done in a public university. Most studies conducted worldwide have used GPA as a benchmark for academic performance (Papadogiannis et al., 2023; Alam & Khatun; 2021).

Academic performance remains a key indicator of educational success, influencing students' future career opportunities and societal contributions. However, various social factors have been shown to impact students' academic outcomes, particularly in tertiary institutions. In Nigeria's South-South region, where socio-economic disparities and diverse cultural influences are prevalent, understanding these factors is crucial for improving academic success. Social factors such as parental employment status, school culture, religion, and demographic variables (e.g., age, gender, and family size) are believed to play significant roles in shaping students' academic performance. Researchers from all across the world have identified the institutional environment, socioeconomic and demographic determinants, extracurricular activities, social media connections, supportive and motivational elements, and instructional quality (Alam & Khatun; 2021).

Objectives of the Study

This study aimed to assess the extent to which these social factors predict students' academic performance in a South-South tertiary institution. By identifying key predictors, the study seeks to inform policies and interventions that promote academic excellence.

The study was guided by the following objectives:

1. To determine the academic performance of undergraduate students in the institution.
2. To assess the factors influencing academic performance of undergraduate students in institution.
3. To examine the relationship between demographic factors (age, gender and parents' occupation) and students' academic outcomes.

Research Question
The following research questions were formulated to achieve these objectives:
1. What is the academic performance of undergraduate students in the institution?
2. What are the factors influencing the academic performance of undergraduate students in the institution?

Hypotheses
Based on these questions, the study hypothesized:
1. Age of the students do not significantly influence academic outcomes.
2. Students' gender has no significant relationship with academic performance.
3. Parental occupation significantly predicts students' academic performance.

By addressing these questions and testing the hypotheses, the study provides valuable insights into the social determinants of academic success, particularly in the Nigerian tertiary education context.

Methodology
This descriptive cross-sectional survey was conducted at Novena University in Delta State, the first privately owned college in the state. The study selected a private university to examine how social factors impact students in an environment with individualized attention, and more affluent students. In addition, given the limited research on social factors within private universities in Nigeria, focusing on such an institution provides an opportunity to contribute valuable data to a less-explored area of higher education research. The university, which has 19 departments, has a total student population of 3935. The survey included undergraduate students in the 200-400 level, with a sample size of

358. The survey used a random approach, multi-stage and purposive sampling procedures to choose respondents from the four colleges (Novena University, 2022).

The study used a multistage sampling method to select colleges, departments, levels, and respondents within a private university. Four colleges—College of Medical & Health Sciences (CMHS), College of Management and Social Sciences (CMSS), College of Natural and Applied Sciences (CNAS), and College of Law (CL)—were considered, with two departments randomly selected from colleges with more than one department. Students from 200 to 400 levels were purposively chosen to focus on stable academic experiences, excluding 100-level students to mitigate transitional challenges faced by first-year students, focusing on stable academic experiences to better understand social elements influencing these students.

The total sample size of 398 was distributed proportionally across the colleges based on student population. Further distribution of questionnaires was calculated for selected departments using proportional sampling. The Social Factors and Academic Performance Questionnaire (SFAPQ), developed from a review of relevant literature validated by experts, served as the primary instrument for data collection, capturing essential data on social factors and academic performance which was broken down into the following sections:
1. A demographic and socioeconomic component that asked about age, sex, parents' employment and level of education, pupils' academic achievement, and the number of people living in the home.
2. Additional parts that look at respondents' academic achievement and the variables affecting it.

The surveys were distributed by the investigator following informed permission. Participants received the promise that any data was to be treated in the strictest secrecy and were told not to put down their full names. The respondents' academic achievement was evaluated using the students' cumulative grade point average from the most recent session of school (Mushtaq & Khan, 2012). When questioned about their cumulative grade point average from the previous academic year, the respondents provided that information. By assigning a 1 to a Cumulative Grade Point Average of ≥ 2.75 and a 0 to < 2.75, the weights mean score of 2.75 was used to determine whether the respondents' academic performance was to be classified as excellent or bad (Tadese, Yeshaneh & Mulu 2022).

The statistical tool used in the study for data analysis was the Statistical Package for Social Sciences (SPSS, IBM Corp, Armonk, NY, USA), version 22. SPSS was employed to perform descriptive statistics, the multiple regression analysis to analyze the relationship between social factors and academic performance and the chi-square test, with a significance threshold set at $P<0.05$, was used to

Research Question One: Academic Performance of Students

Fig 1: Academic Performance of Students
Figure 1 depicts that overwhelming majority (91%) of respondents had a G.P.

evaluate if there are indeed any statistically significant variations between categorical variables. Ethical permission was acquired from both the state's ministry of health and the university's ethics committee (reference number: HM/596/T2/85).

Results
Of the 398 Social Factors and Academic Performance Questionnaire (SFAPQ) distributed, 367 questionnaires were retrieved giving a response rate of 92%.

Socio-demographic characteristic of respondents
The majority (80.9%) were aged 16–25, with an average age of 22.3 years (SD = 3.74). Females comprised 64.3% of the respondents, while males accounted for 46.5%. Household sizes varied, with 42% having 1–5 members. Most parents (61%) had tertiary education, followed by 16.1% with secondary, 12% with primary, and 10.9% with no formal education. Respondents were mainly final-year students (51%), with others in their third (36.5%) and second (12.5%) years. Parents' occupations included business (41.1%), civil service (25.3%), farming (16.3%), professionals (8.7%), and petty trading (8.4%).

above 2.75, which indicates a strong performance, whereas 9% had a G.P. below 2.75, which indicates a poor academic performance.

*Ogbolu, C.N.,Okonkwo, C. B.,Akinloju, A. R.,Agofure, O.,Iyawa, J. (*2024)

Research Question Two: Factors Influencing Academic Performance

Table 1: Logistic Regression for Predictors of Factors Influencing Academic Performance of Students (N=367)

Variable	Wald	Df	Sig.	Exp(B)	95% C.I Lower	Upper
Parental background	0.277	1	0.598	0.913	0.652	1.280
Lack of Parental influence or motivation	4.167	1	0.041	0.778	0.612	0.990
Freedom for social life	2.573	1	0.109	0.828	0.658	1.043
Social media	4.175	1	0.041	0.735	0.547	0.988
Peer group influence	14.183	1	0.001	0.600	0.460	0.783
Financial hardship	5.404	1	0.020	0.727	0.556	0.951
School Culture	0.197	1	0.658	1.061	0.817	1.378
Religion	0.000	1	0.991	1.002	0.764	1.313

Table 1 presents the factors that influence their academic performance. It revealed that School culture (OR=1.061, 95% CI=0.817-1.378, P=0.658) and religion (OR=1.002, 95%CI=0.764-1.313, P=0.991) were the most likely causes of variation in respondents' academic performance.

Association between Academic Performance and Socio-Demographics Characteristics

Table 2: Chi-Square chart Demonstrating the Association between Respondents' Ages and Academic Achievement (N=367)

Variable	Poor Academic Performance	Good Academic Performance	Chi-Square	Df	Sig
16-25	27 (7.4%)	270 (73.6%)	1.418	2	0.492
26-35	5 (1.5%)	61 (16.6%)			
36>	1 (0.3)	3(0.8)			

Table 2 demonstrates that there is no discernible relationship (P>0.05) between the age of the participants and academic achievement

Table 3: Chi-Square Chart Demonstrating the Association between Respondents' Gender and Academic Achievement (N=367)

Variable	Poor Academic Performance	Good Academic Performance	Chi-Square	Df	Sig
Male	12 (3.3%)	119 (32.4%)	0.007	1	0.933
Female	21 (5.7%)	215 (58.6%)			

There is no discernible association between the gender of the participants and academic success, according to Table 4's study of the connection between gender and accomplishment. P is greater than 0.05.

*Ogbolu, C.N.,Okonkwo, C. B.,Akinloju, A. R.,Agofure, O.,Iyawa, J. (*2024)

Table 4: Chi-Square Chart Demonstrating the Association between Respondents' Parents' Occupation and Respondent's Academic Performance (N=367)

Variable	Poor Academic Performance	Good Academic Performance	Chi-Square	Df	Sig
Farmers	11 (3.0%)	49 (13.4%)	12.209	4	0.016
Business	8 (2.2%)	143 (39.0%)			
Civil Servants	8 (2.2%)	85 (23.2%)			
Petty Traders	5 (1.4%)	26 (7.1%)			
Professionals e.g Doctors, Lawyers, Nurses	1 (0.3%)	31 (8.4%)			

Table 5 indicates a statistically significant correlation (P<0.05) between the respondents' academic success and the employment of their parents.

Discussion

The study found that 91% of students had good academic performance, aligning with Tadese et al. (2022), though slightly higher than their 66% result. Key factors influencing academic performance included school culture and religion. School culture has been defined as the entire set of standards, attitudes, and beliefs specific to a school (Bayar and Karaduman, 2021; Afemikhe *et al.,* 2022) contrasting Afemikhe *et al.,* (2022), who reported a negative correlation. Additionally, students engaged in weekly religious activities showed higher GPAs, as such participation fosters discipline, ethical development, and reduced involvement in boundary activities and substance misuse (Ali *et al.,* 2019). The operations and attitudes of school management have an impact on pupils' academic performance. Students' academic performance is influenced by their school environment in terms of motivation, social impacts, and socioeconomic consequences (Ozcan, 2021).

Additionally, the results showed no connection between respondents' ages and academic success. This result demonstrated that younger respondents—those aged 16 to 25 (73.6%)—performed better academically than their older colleagues. This suggests that a person's academic performance is higher when they are younger and decrease when they get older. However, the results also indicated that younger respondents had a higher prevalence of poor academic performance than older respondents. Inferentially, this is the reason why a correlation comparison by 0.005 shows a non-significant association, and age cannot be connected to academic achievement although age is said to be a predictor to academic performance. This result contrasts with research done in Kenya on secondary school students aged 12 to 23 that discovered a strong correlation between students' ages and academic achievement. Additionally, it demonstrated that younger respondents—those between the ages of 12 and 15—performed better than those over the age of 15 (Momanyi et al., 2015). According to research by Tadese et al., (2022), younger students (ages 20–25) outperformed older students (ages 25–29) in terms of academic accomplishment. This suggests that aging does not impair

academic achievement because older students tend to be smarter, more mature, experienced, and may have better study drive.

The findings also revealed no connection between respondents' gender and academic success. A higher percentage of females (58.6%) than males (32.4%) were found to have good academic performance, but a higher percentage of females (5.7%) than boys (3.3%) were also found to have low academic performance. This is finding is in line with empirical studies carried out in India and Nigeria by Radheshyam *et al.,* 2017; Goni *et al.,* 2015 who reported that females in tertiary institution performed better than males and no statistical association was found between the gender and academic performance. This might be explained by the differences in study habits between men and women, with women tending to be more concentrated and disciplined than men (Hussaini & Shukor, 2023).

The results showed that there was no direct permutation since it depends on the parents' occupations. Those with business-oriented parents had strong academic performance (39.0%), followed by those with civil service jobs (23.2%), farmers (13.4%), and professionals (8.4%). It may be seen that the calculated is below the standard by comparing the significant level for the test and the 5% significant level. The conclusion drawn is that parents' employment position can affect their children's academic achievement as a result of the null hypothesis being rejected. These results are similar to those of Atolagbe, Oparinde, and Umaru (2019), who discovered a significant correlation between parents' occupational background and secondary school students' academic performance. However, their study also showed that students with parents who work in offices and schools outperformed students with parents who do not work or

who work irregular hours. Because of this, it was argued that a parent's line of work can have a big impact on their child's academic achievement. Similarly, Okoye and Ogbu (2016) observed that since they may establish a more suitable educational setting for their ward, secondary school children with high income level parents have a considerable advantage over students with poor income status parents. Studies show that parents in blue-collar or government employment are more likely to encourage their kids' education (Umar, 2017). Parents that understand the value of learning and the way it may help them in the workforce would encourage their children to pursue their career goals and attain the highest levels of academic success (Okoye & Ogbu, 2016).

Conclusion
This study assessed social factors as predictors of students' academic performance in a South-South tertiary institution in Nigeria, focusing on a private university. The findings revealed significant relationships between social factors, such as parental employment status and socio-cultural influences, and students' academic performance. These results underscore the critical role of social environments in shaping educational outcomes and highlight the importance of addressing these factors to enhance academic success.

Recommendations
1. Educators should develop programs and strategies to support students from diverse socio-cultural and economic backgrounds, promoting equity in academic achievement.

2. For Policymakers should implement policies that address socio-economic disparities, such as scholarships and funding for students from underprivileged

backgrounds, to reduce barriers to academic success.

3. Parents are encouraged to provide stable and supportive home environments that prioritize education and address socio-cultural challenges affecting students' performance.

4. Researchers can further conduct comparative studies between private and public universities to provide a broader understanding of how social factors impact academic performance across diverse educational contexts.

Acknowledgement

References
Afemikhe O. A, Imasuen K, Idusogie V.O (2022). School culture, practices and structure as predictors of performance of secondary school students in Edo state, Nigeria. *European Journal of Educational Studies, 9*(2).

Alam M. J, Khatun F. (2021). Factors affecting academic performance of undergraduate students: evidence from a public university in Bangladesh. *Journal of Education and Practice*, 15(5).

Ali M. A, Rathore F, Siddique, D (2019). The Impact of Religious Practices and Values on Academic Achievements of Students at Secondary Level. *Journal of Education and Practice, 10*(12).

Atolagbe A, Oparinde O, Umaru, H. (2019). Parents' occupational background of student performance in public secondary schools in Osogbo metropolis, Osun state, Nigeria. *African Journal of Inter/Multidisciplinary Studies, 1*(1).

Banik P, Kumar B. (2019). Impact of Information Literacy Skill on Students' Academic Performance in Bangladesh. *International Journal of European Studies*, 3, (1), 27-33.

Bayar A, Karaduman H. A (2021). The effects of school culture on student academic performance. *International Journal of Education, 9*(3), 99-109.

Goni U, Wali Y. S. B, Ali H. K, Bularafa M.W (2015). Gender differences in students' academic performance in colleges of education in Borno state, Nigeria: implications for counseling. *Journal of Education and Practice, 6*(32).

Hussaini A. I, Shukor N. S. A. (2023). Factors affecting students' academic performance: a review. Res Militaris, 2(6).

Islam A. Tasnim S. (2021). An Analysis of Factors Influencing Academic Performance of Undergraduate Students: A Case Study of Rabindra University, Bangladesh (RUB). *Shanlax International Journal of Education*, 9 (3), 127-135.

Kocsis, Á., & Molnár, G. (2024). Factors influencing academic performance and dropout rates in higher education. *Oxford Review of Education*, 1–19.

Momanyi, J. M., Too J, Simiyu C. (2015). Effect of students' age on academic motivation and academic performance among high school students in Kenya. *Asian Journal of Education and e-learning, 3*(5), 2321-2454.

Mushtaq, I. and Khan S. N. (2012). Factors affecting students' academic performance. Global Journal of *Management and Business Research, 12*(9).

Novena University. (2022). About us. https://novenauniversity.edu.ng/

Okoye F. O, Ogbu S. I (2016). Effects of parents' occupation and Educational Background on students' academic performance in secondary schools in Anambra State. *International Journal of Research in Business, Management and Accounting 2*(1).

Olagundoye, C. Adebile, R. F. (2019). Family size influence of students' attitude and performance in literature-in-english in public secondary schools. *Asian Journal of Interdisciplinary Research, 2*(3).

Ozcan, M. (2021). Factors affecting students' academic achievement according to the teachers' opinion. *Education Reform Journal*, *6*(1), 1–18.

Papadogiannis, I., Poulppoulos., V., Platis N., Vassilakis C. (2023). First grade GPA as a predictor of later academic performance in High School. *Knowledge, 3*(3), 513-524.

Radheshyam, H. C., Chandrahas, C. H., Rakesh L. H (2017). Factors influencing academic performance of students at university level exam: a literature review. *International Journal of Research in Engineering and Technology*, 2321-7308

Suleiman, I. B., Okunade, O. A., Dada, E. G., & Ezeanya, U. C. (2024). Key factors influencing students' academic performance. *Journal of Electrical Systems and Information Technology*, *11*(1), 41

Tadese, M., Yeshaneh, A. Mulu G. B. (2022). Determinants of good academic performance among university students in Ethiopia: a cross sectional study. *BMC Med Educc, 22*(395).