INFLUENCE OF HOUSEHOLD CHORES AND STREET HAWKING ON ACADEMIC PERFORMANCE OF JUNIOR SECONDARY STUDENTS IN MATHEMATICS, ODOGBOLU LOCAL GOVERNMENT AREA OF OGUN STATE, NIGERIA

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Abstract

This study investigated the influence of household chores and street hawking on the academic performance of junior secondary Schools students in Mathematics in Odogbolu Local Government Area of Ogun State, Nigeria. A descriptive survey research design was adopted. The population comprised all Junior Secondary School students in the area, from which a random sample of 200 students was selected across 10 schools. Two instruments were used for data collection: the Household Chores and Street Hawking Questionnaire (HCSHQ) and the Mathematics Performance Test (MPT). The instruments were validated by experts in educational measurement and evaluation, yielding reliability coefficients of 0.86 and 0.76, respectively. Two research questions were raised and were analyzed using Multiple Regression Analysis (MRA). Findings revealed a significant joint contribution ($F_{(2,199)} = 44.427$, $p < 0.05$) of household chores and street hawking to students' academic performance in Mathematics, indicating that both variables jointly explained a substantial proportion of variance in students' achievement. Furthermore, both household chores ($\beta = 0.238$, $t = 3.763$; $p < 0.05$) and street hawking ($\beta = 0.427$, $t = 6.747$; $p < 0.05$) individually influenced mathematics performance, with

street hawking showing a more substantial adverse influence. The study concluded that while moderate home engagement can instill discipline and responsibility, excessive chores and hawking impede academic success. It was recommended that parents, educators, and community stakeholders reduce children's involvement in household and commercial labour, enforce child protection laws, and promote policies that support educational access and retention for all learners.

Keywords: Household chores, Street hawking, Academic performance, Mathematics achievement, junior secondary school students

Introduction

Education is usually seen as one of the most practical tools for driving positive change in individuals and society. Among the roles it plays is inculcating the right kind of values and attitudes for the survival of the individual through the acquisition of appropriate skills, mental and physical abilities and the competence to contribute to the development of his society. In response to the need to educate its citizens, the Federal Government of Nigeria has issued a National Education Policy (NPE) document to guide and assist Homes and Schools in accomplishing this excellent task. The document contains the national targets as they are.

1. To cater for differences in interests, talents, opportunities, and future roles
2. To provide all primary school graduates with the opportunity to further their education at a higher level, irrespective of sex, religion, or ethnic background
3. To preserve cultural heritage by developing and promoting the Nigerian languages, arts, and culture
4. To foster national unity by emphasizing the divers' common ties that unite Nigerians
5. To raise a generation of people who can think for themselves, respect the views and feelings of others, respect the

dignity of labour, and be a patriotic and good citizen.

This was probably why the National Policy on Education (2016) states that every Nigerian child shall have the right to equal educational opportunities and shall be educated according to his or her ability, irrespective of any real or imagined disabilities.

To achieve the stated goals, the family must not be neglected, as the biological and social group into which a child is born and learns its first language. This is because children depend on their families for survival and the necessities of life, such as food, clothing, shelter, and medical care, as well as for social and moral growth. Oyediran and Oyewole (2021) claimed that there are two important people in every child's educational life. One is his/her parents, while the other is the professional of this institution. He noted that parents are recognised as their children's primary teachers, while the professionals should be viewed as the parents' advisors.

Traditionally, children in African families are raised to assist their parents by taking part in household chores and in some cases street hawking. However, Ambetsa (2016) sees household chores as activities such as washing dishes, washing clothes, sweeping the compound, and running errands for the elderly, and so on. Among these activities some are unplanned and are more time-consuming and tiring (Ambetsa, 2016). Also, some parents engage their children in street hawking to ensure family survival and sustainability. These drive the hawkers to move through the main streets and public arenas, where they place trays or baskets on their heads to sell their goods (Usman, 2018).

According to Oluwagbohunmi (2019), some students who engage in household chores and street hawking do so in the morning before going to school, in the evening immediately after school, on weekends, and during vacations. These household chores and street hawking activities eventually lead to academic distraction and harm the academic performance of affected students, especially in Mathematics. Mathematics, which is seen as an abstract subject, requires learners' full attention, and even a slight distraction can lead to poor performance. It is expected that, for an individual to function effectively in society, that person needs to possess good knowledge of Mathematics, especially in this era of technological advancement (Yusuf & Aminu, 2023).

Despite the importance of

Mathematics to an individual's life and the nation at large, research has shown that students still perform poorly in both internal and external examinations (Adebule, 2014). This poor performance is also corroborated by the chief examiners' reports of the West African Examinations Council (WAEC), the National Examinations Council (NECO), and the National Business and Technical Examinations Board (NABTEB).

Although efforts have been made to identify causes of poor performance and improve students' learning outcomes in Mathematics, the available evidence indicates that the desired outcomes have not yet been achieved. Against this background, the researchers examined the influence of household chores and street hawking on the mathematics performance of junior secondary students in Ogun State. This research is conducted to determine the extent to which these variables contribute to students' academic performance in Mathematics.

Theoretical Review

This study is built on Bronfenbrenner`s Ecological Systems Theory (1979).

Bronfenbrenner's Ecological Systems Theory posits that human development occurs within a series of interrelated systems—microsystem, mesosystem, exosystem, macrosystem, and chronosystem—that shape individual behaviour and learning outcomes. According to Bronfenbrenner, a child's immediate environment —particularly the home and school —forms the microsystem, where direct interactions occur. In this study, household chores and street hawking constitute activities within the child's microsystem that significantly influence academic engagement and cognitive development.

At the mesosystem level, interactions between the home and school environments affect students' preparedness and participation in learning. When parents overburden children with household responsibilities or commercial tasks, this may conflict with the school's academic demands, leading to fatigue, absenteeism, and poor concentration during Mathematics lessons. The exosystem includes the parents' socio-economic conditions, parents` employment status, and family survival strategies, which often compel children to engage in street hawking. The macrosystem embodies cultural and societal expectations, including traditional gender roles that assign more domestic tasks to female children. Finally, the chronosystem reflects how these

influences evolve, shaping long-term attitudes and learning behaviours.

Thus, Bronfenbrenner's theory provides a framework for understanding how circumstantial and environmental variables interact to influence students in Mathematics. It emphasises that learning is not an isolated cognitive process but a product of continuous interaction between the learner and the surrounding environment.

Statement of the Problem

Children in traditional African families do involve in household chores and street hawking to support their family members (Ambetsa, 2016). This has eventually created an academic distraction among the affected students, leading them to perform poorly in their studies, especially in Mathematics. The lingering poor performance in Mathematics certificate examinations, such as WAEC, over the years has caused educational stakeholders to worry about how to improve students' performance in the subject. Previous researchers have identified problems in teaching/learning Mathematics across different levels of education, particularly in secondary education. Therefore, this study was designed to examine the influence of household chores and street hawking on students' academic performance in Mathematics in Odogbolu Local Government, Ogun State.

Objectives of the Study

The main objective of the study was to investigate the influence of household chores and street hawking on junior secondary schools students` Mathematics performance in Odogbolu Local Government Area, Ogun State. Specifically, the study found out.

1. The relative contribution of household chores and street hawking to students` academic performance in Mathematics
2. The composite effect of household chores and street hawking on academic performance in Mathematics

Research Questions

The study sought answers to the following question:

1. To what extent will household chores and street hawking jointly determine students' academic performance in Mathematics?
2. To what extent will household chores and street

hawking relatively determine students' academic performance in mathematics?

Methodology

The descriptive survey design was adopted for the study. This involved collecting information on the influence of household chores and street hawking on students' academic performance in Mathematics in the Odogbolu Local Government Area of Ogun State. The population consisted of all junior secondary students in the Odogbolu Local Government Area of Ogun State. Simple random sampling techniques were used to select ten (10) out of [seventeen (17) junior secondary schools in the local government area. Thereafter, simple random sampling techniques were used to select 20 JS wo students from each of the selected schools in the Odogbolu Local Government Area of Ogun State, resulting in a total of 200 respondents who formed the study sample.

The instruments used for data collection was an adapted questionnaire from Popoola and Rasaq (2021) Tagged Household Chores and Street Hawking Questionnaire (HSQ) and Mathematics Performance Test (MPT). Each of the Household Chores and Street Hawking Questionnaire (IHSQ) had two sections. Section A consisted of demographic information, including the school's name, the respondent's sex, class, and type of school. Section B had items on household chores and hawking. These items were structured on a 4-point rating scale: Strongly Agree, Agree, Disagree, and Strongly Disagree, with corresponding values of 4, 3, 2, and 1 respectively. Experts in Tests and Measurements established the face and content validity of the instruments. The instrument's reliability was established using the parallel-test method. This involved administering the instrument to two groups simultaneously, who were not included in the study. These sets of scores were correlated, and a reliability coefficient of 0.86 was established using Pearson correlation.

The Mathematics Performance Test (MPT). is a four-option multiple-choice test an initial pool of forty (40) questions was drawn to cover JS II topics in Mathematics. The items were from past Junior School Certificate Examination questions that corresponded to the topics covered by the students. The instrument's reliability was established using the parallel-test method. This involved administering the instrument to two groups at the same time, who were not included in the study. These sets of scores

were correlated, yielding a reliability Which too sets are you talking about? coefficient of 0.76.

The researchers personally administered the research instrument. Two hundred copies of the instrument were administered and retrieved by the researchers, who took time to explain its content to the respondents. The administration of the ten schools was done within two weeks, as the schools were not in the exact location. The data collected were analysed using Multiple Regression Analysis (MRA).

Result

H_1: To what extent will household chores and street hawking jointly determine students' academic performance in Mathematics?

Table 1: Model Summary of the Joint contribution of household chores and street hawking to students' academic performance in Mathematics

Multiple R = .558
Multiple R^2 = .311
Adjustment R^2 = .304
Std. Error of the Estimate = 2.224

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	439.519	2	219.759	44.427	.000**
Residual	974.476	197	4.947		
Total	1413.995	199			

a. Dependent Variable: performance in mathematics

b. Predictors: (Constant), Street Hawking, House Chore

Table 1 revealed that the joint contributions of the two independent variables (household chores and street hawking) were examined. Table 1 shows that the regression yielded a coefficient of multiple regression (R) of 0.558, a coefficient of determination (R^2) of 0.311, an adjusted R^2 value of 0.304, and a standard error of 2.224. The result revealed a significant effect ($F_{(2,199)} = 44.427$, $p < 0.05$), indicating that the predictor variables, when combined, significantly determine students' performance in Mathematics. The table, however, shows that the predictor variables jointly accounted for 31.1% of the variance in the dependent variable ($R^2 = 0.311$).

Hence, household chores and street hawking combined explained 31.1% of the variance in students' performance. Mathematics in comparison, the remaining 68.9% is due to other factors not considered in this study. This result shows that, together, household chores and street hawking significantly explain variations in academic performance.

H_2: To what extent will household chores and street hawking relatively determine students' academic performance in Mathematics?

Table 2: Relative contribution of household chores and street hawking to students' academic performance in Mathematics

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
(Constant)	7.105	1.222		5.814	.000
House Chore	.294	.078	.238	3.763	.000
Street Hawking	.314	.047	.427	6.747	.000

a. Dependent Variable: performance in mathematics

Table 2 presents the relative contribution of household chores and street hawking to students' academic performance in Mathematics. The results indicate that both household chores and street hawking are significant predictors of students' performance in Mathematics, as their p-values are less than 0.05. Specifically, street hawking ($\beta = 0.427$, $t = 6.747$; $p < 0.05$) made the most substantial contribution to students' performance in mathematics. The unstandardized coefficient (B = 0.314) suggests that a one-unit increase in students' involvement in street hawking corresponds to a 0.314-unit change in Mathematics performance, assuming other factors remain constant. This implies that street hawking exerts a substantial influence on students' performance in mathematics—likely because it imposes competing time and energy demands on learners.

Household chores ($\beta = 0.238$, $t = 3.763$; $p < 0.05$) also significantly contributed to mathematics performance, though to a lesser extent. The coefficient (B = 0.294) indicates that for every one-unit increase in household chore involvement, students' Mathematics performance increases by 0.294 units, holding other variables constant.

Discussion

Research question ono revealed that household chores and street hawking jointly

exerted a significant influence on students' academic performance in mathematics. This implies that when considered together, these two variables meaningfully determine how well students perform in the subject. The result indicates that the combination of domestic responsibilities and hawking activities significantly contributes to variations in students' learning outcomes. In other words, students who are heavily engaged in home and street-based tasks tend to have lower mathematics performance than those who are not.

This outcome supports the findings of Popoola and Rasaq (2021), who reported that students involved in hawking and domestic work are often too exhausted to engage meaningfully in schoolwork. Also, that of Chinyoka and Naidu (2014), who found out that children from low-income families spend long hours on household chores, reducing their study time and concentration. Likewise, Emmanuel (2015) noted that girls tasked with cooking and cleaning experience fatigue and limited participation in academic activities. The current result also aligns with Adebule (2014), who observed that persistent poor performance in mathematics among Nigerian students is often linked to out-of-school distractions, including domestic labour and petty trading.

Research Question two revealed that both household chores and street hawking contributed to students' performance in mathematics, with street hawking exerting a more substantial influence. This suggests that while domestic responsibilities may interfere with study habits and cause fatigue, the disruptive effects of hawking are even more pronounced. Students who hawk before or after school often arrive late, attend irregularly, or become exhausted, which limits their classroom participation and concentration during mathematics lessons.

This finding aligns with Busari's (2016) outcome, which noted that students who engage in street hawking often underperform academically because hawking reduces their rest and study time. Similarly, Ambetsa (2016) found that learners burdened with heavy household or trading duties experience academic distraction and low motivation. Oluwagbohunmi (2019) also affirmed that students who hawk to support their families often find it challenging to complete assignments and concentrate on mathematics.

Conclusion

This study investigated the influence of household chores and street hawking on the academic performance of junior secondary school students in mathematics

within Odogbolu Local Government Area of Ogun State. The findings revealed that both household chores and street hawking jointly and independently exert significant influence on students' performance in Mathematics. The results suggest that excessive engagement in home and street-related activities deprives students of adequate study time, reduces concentration, and leads to poor academic outcomes. Street hawking, in particular, was found to have a more substantial negative influence, as it exposes students to physical exhaustion, lateness, and absenteeism, which directly interfere with learning continuity.

The study concludes that while helping at home can instil responsibility, excessive domestic and economic engagement undermines students' educational progress. It further affirms that socio-economic pressures compel many parents to rely on children for household labour or income generation, inadvertently compromising their academic development. Hence, addressing these challenges requires both parental reorientation and systemic support to safeguard children's right to quality education.

Recommendations

Based on the findings, the following recommendations are made:

1. Parents should be sensitised on the adverse effects of excessive household chores and street hawking on children's learning and encouraged to prioritise education over income-generating activities.
2. The government should enforce child protection laws that prohibit child labour during school hours and provide financial empowerment programs for low-income families.
3. Schools should establish counselling units to identify at-risk students and provide academic and emotional support to help them balance school and home responsibilities.

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