

The relationship between students' participation in hawking activities and academic performance in public day secondary schools in Ugunja Sub-County, Kenya

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ABSTRACT

Education has been recognised as a critical component of economic and social growth in society because of its connection with social, political, and economic development. It plays a key role in reducing poverty levels, enhancing productivity, eliminating hunger, reducing mortality rates, and promoting gender equality. Because of these, developed countries have perfected their education systems to achieve their full benefits. However, most developing countries, like Kenya, are still struggling due to their economic and social statuses. This study investigated the relationship between students' participation in hawking activities and their academic performance in Ugunja Sub-County, Kenya. The study tested the null hypothesis, H_0 : There is no statistically significant relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya, to explain this relationship. Basu and Van's theories about the economics of child labour guided the study. The study was conducted through a descriptive survey design that targeted 1498 public day secondary school students who engaged in hawking activities in Ugunja Sub-County. We used Krejcie and Morgan's formula to select a sample of 306 students, reaching them through snowball sampling. A structured questionnaire and a Document Analysis Guide (DAG) were used to collect the data, which were analysed descriptively using SPSS version 23 to arrive at means and standard deviations and inferentially using Pearson's correlation at a 0.05 alpha level of statistical significance. The findings revealed a moderate negative correlation of $r = -0.584$, at $p = 0.008$, between students' participation in hawking activities and their academic performance. The study concluded that hawking activities negatively influence secondary students' academic performance. This suggests that hawking activities may hinder the achievement of the SGD's education goals if the current situation persists. The study recommends that the Government of Kenya increase the capitation of secondary schools and implement stricter rules to protect children's right to quality basic education.

Keywords: Academic Achievements, Child Labour, Equality, Hawking Activities, Students, Learning Outcomes

I. INTRODUCTION

Education is a critical component of social and economic growth in any society (World Bank, 2018). It also connects significantly to all the aspects of social, political, and economic development in all countries across the globe (Oyugi et al., 2023). This is because education enhances productivity, reduces poverty, eliminates hunger, promotes gender equality, reduces mortality rates, and promotes economic progression (Oyugi et al., 2023). It is, therefore, a universally recognised investment in human capital (World Bank, 2018). However, the education performance rate varies from one continent, region, state, county, and place to another. For instance, most developed countries like the UK, China, and the US register relatively higher rates of performance in education (Orodho, 2014). These high rates could be attributed to the funding of education in these countries and other factors that promote retention of the learnt content. Orodho (2014) explains that in most developed countries like the USA and China, the state fully funds basic education (both primary and secondary) in all government-run schools. The government also partially or fully funds higher education levels in government-run colleges and universities based on individual students' skills and economic backgrounds in these countries. Therefore, students in such countries engage in economic activities like hawking as academic programmes, leisure activities, or to explore how they are done (Paul et al., 2019).

Developing countries also strive to provide quality education to their citizens. In most countries globally, primary and secondary education are considered basic for every child between the ages of 6 and 18 (United Nations Educational, Scientific and Cultural Organisation [UNESCO], 2021). In Kenya, for example, secondary education sponsorship is an initiative by the government, private individuals, and non-governmental organisations (that support students from underprivileged backgrounds to pursue an education). The Government of Kenya (GoK) has been taking steps to make quality basic education fully state-funded. For instance, in 2008, the Grand-Coalition Government

provided fee subsidies to public day secondary education. Subsequent governments have fully catered for the tuition fee for education in public day secondary schools. For instance, in 2017, the government implemented the Free Day Secondary Education (FDSE) policy to cater to public day secondary education tuition fees. However, many public day secondary schools still find it challenging to survive on the fees from the government since the government does not provide subsistence and students' meals. This has made it necessary for most public day secondary schools to charge fees for the lunch programmes, whose costs the parents must meet. The inability of the parents to meet all their children's educational and other needs (Orodho, 2014), the students' pressure to satisfy their basic needs, and peer influence (Ojijo, 2016) have made some public day secondary school (PDSS) students to engage in hawking activities. This happens both during and outside school-going hours (Ojijo, 2016). Some economic activities accessible to secondary school students include Boda Operations (motorcycling) (Oyugi et al., 2023), sand harvesting, hawking, fishing, and collecting and selling scrap metals. They can also work in farms and plantations, stock market businesses, selling cereals, and providing cheap domestic assistance, among other activities. Studies have shown that many students in PDSS take part in hawking activities either during or outside school hours to cater for some of their needs, meet the cost of their education, and help their family members.

Students' engagement in hawking activities poses a significant threat to achieving Goal 4 of Sustainable Development Goals (SDGs), especially Target 4.1, which emphasises the provision of publicly funded, equitable, inclusive, and quality basic education without any discrimination (UNESCO, 2021). Due to the magnitude of this matter, many scholars have thrown their weight behind the study of hawking activities and have found conflicting results. Many studies have established that students' participation in hawking activities leads to dismal performance (Paul et al., 2019; Oluwagbohunmi, 2019; Ijadunola et al., 2015; Kaletapwa & Yumbak, 2013; Ampomah, 2012; Oyugi et al., 2023; & Ojijo, 2016). In Kenya, the government has taken steps to resolve the problem of students' engagement in income-generating activities. For example, to ensure access, quality, retention, transition, and success rate in secondary schools, the Government of Kenya has adopted global policies like the Universal Basic Education outlined in the Vision 2030, the SDGs, Constitution 2010, the Universal Basic Education Declaration, The Children Act of 2007, and the Basic Education Act of 2013 (Oyugi et al., 2023). Also, the state has adopted the statements of the World Labour Organisation, which has often outlined that children below eighteen years should not be engaged in income-generating activities, as it is equivalent to child labour. The state has also adopted national policies like the Constitution 2010, the "Mop-up" during students' transition from primary to secondary education, and the Free Day Secondary Education Policy to provide tuition funds for students in public secondary schools. However, even with all these policies in place, students in Public Day Secondary Schools are still forced to engage in hawking activities because the funds provided by the government are still inadequate, as they only cater for tuition fees and do not cater for their other educational and personal needs of the students, and their families cannot afford to provide all these.

The office data indicate that 1,498 out of the 5,589 public day secondary school students participated in these activities in Ugunja Sub-County in 2019 alone (Ugunja SCDE, 2020). This is a significant number because it represents 26.80% of the total population of students from this sub-county. Also, the academic performance in public day secondary schools for 2016, 2017, 2018, and 2019 has been 3.75, 3.62, 3.7, and 4.2, respectively (Ugunja SCDE, 2020). The performance has never passed D+ in the last four years, which is a worrying trend, calling for an immediate investigation of the relationship between students' participation in hawking activities and their academic performance. Against this background, the current research is deemed necessary as a matter of urgency. The research is timely as it seeks to provide these missing facts and provide data for policy formulation by explaining the kind and strength of the relationship between students' participation in hawking activities and their academic performance in Ugunja Sub-County, Kenya.

1.1 Statement of the Problem

Education has been recognised as a critical component of economic and social growth in society because of its connection with social, political, and economic development (World Bank, 2018). It plays a key role in reducing poverty levels, enhancing productivity, eliminating hunger, reducing mortality rates, and promoting gender equality (Oyugi et al., 2023). Because of these, developed countries have perfected their education systems to achieve their full benefits. However, most developing countries, like Kenya, are still struggling due to their economic and social statuses. Due to this, students in public secondary schools in Kenya engage in hawking activities in different villages, centres and towns to either help their parents raise income or provide for their own basic needs due to the low socioeconomic status of their families (Paul et al., 2019). Although these activities are vital in providing the necessary financial support to such students, they compete for their time, energy and attention, threatening their academic performance.

Ugunja Sub County is seriously affected by engagement in hawking activities because the data drawn from the Sub-County Director of Education's report posted on the notice board in 2020 to show the trend of students academic performance and the possible hinderances indicated that out of 5,589 students in public day secondary schools in the sub county, a whopping 1,498 (26.8%) engaged in hawking activities as of 2019. This situation is contrasted by the

relatively low academic performance in KCSE for the period between 2016 and 2019 (which are 3.75 in 2016, 3.62 in 2017, 3.7 in 2018, and 4.2 in 2019) (Ugunja SCDE, 2020).

The current situation is so grave that if it is not resolved, it will pose a potential threat to the achievement of SDG 4 on quality basic education, Kenya's Vision 2030, and the UBE, which are crucial policies in raising the socioeconomic status of the country. To address the issue, many empirical studies have been conducted to understand it, explain the relationships and provide solutions to this challenge. Other policies have also been established to address the challenge. However, all these have not addressed the problem exhaustively because of inadequate facts. Additionally, the existing policies have either been ineffective or poorly implemented due to a lack of these facts and data.

It is these empirical and policy gaps that this study sought to fill by investigating how students' participation in the various hawking activities in the study area relates to their academic performance. This study's finding is expected to provide the missing data and proposals on how to either formulate implementable policies or strategies for correcting the implementation hitches to address the problem. Therefore, the SDG 4 on quality basic education, Kenya's Vision 2030, and the UBE will be achieved, and the socioeconomic status of the country will be improved.

1.2 Research Objective

The Objective of this study was to assess the relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya.

1.3 Research Hypothesis

H₀₁: There is no statistically significant relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya.

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Basu and Van 1998 Theory of Economics of Child Labour

This research is supported by Basu and Van's (1998) theory of Economics of Child Labour, which stipulates that child labour can have complex and often negative effects on their educational outcome. Basu and Van's (1998) argue that even though the students' engagement in hawking activities may provide short-term benefits to the students and their families, it often leads to long-term negative consequences on students' educational attainment and future opportunities in life. This phenomenon results from three facts. Firstly, the trade-off between working and academic performance often negatively affects academic performance and retention rate. Secondly, their economic backgrounds drive them to engage in hawking activities as they work due to their financial challenges. Finally, the existing policy interventions make the situation complex since just stopping the students from engaging in hawking activities demands that their parents' earnings be increased to compensate for their children's income if they are working. However, this is a complex issue since the market demands relatively cheap labour that could only be realised through students' engagement in hawking activities, and parents' wages cannot be increased. Therefore, students engage in these activities because of economic pressure beyond their personal and family control. Because of this, students are still engaging in hawking activities, potentially threatening their academic achievements, since the existing policies have been complex in implementation.

2.2 Empirical Review

Hawking can be described as selling commodities informally in public places like streets and from one place to another (Paul et al., 2019). Participation in these activities has also increased due to poverty, lack of sponsorship, high cost of living, single parenthood, peer influence, and large family size, among other factors (Ampomah, 2012; Paul et al., 2019). According to a 2012 report by the International Labour Organisation (ILO), many secondary school-aged youth engage in hawking along the roadways of urban areas due to the rise of capitalism, urbanisation, and modernisation (Paul et al., 2019). The adults also prefer this age of children because students are considered a source of cheap labour while getting some income to sustain themselves (and, to some extent, their families). Due to the rise of this menace among public day secondary school students across the globe, numerous studies have been undertaken to ascertain the correlation between hawking activities and academic achievement at this educational level.

According to research conducted by Paul et al. (2019) to determine the effect of street hawking on the educational achievement of teenagers in Wukari Metropolis, hawking adversely influences academic performance. Their study used a sample size of 100 teenagers to determine the effects of street hawking. This research was crucial to the current study as it provided literature on the impact of hawking on educational performance among teenagers. The study also used a statistical method of analysis through the quantitative approach. However, it cannot fully answer the question of the just-completed research that sought to establish the relationship between students' participation in hawking

activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya. This is because the findings are limited to Wukari Metropolis. The scholars also used mixed methods, while the current study used a purely quantitative approach. Finally, this study also looked at a semi-urban locale within which the influences of urbanisation and modernisation have not been far-reaching.

Oluwagbohunmi (2019) also argues that students who participated in hawking activities exhibited poor academic performance due to poor study habits. The descriptive design study involved a sample population of 180 secondary school students selected purposively to establish the influence of hawking in the streets on study habits and academic performance. The results of Oluwagbohunmi's study could not be generalised to the current research area due to its limitations, which the just-concluded study sought to address. Firstly, Oluwagbohunmi (2019) collected data using questionnaires and social studies achievement tests, which could be equated to the document analysis guide for the current study. Secondly, the study's location differed from the current one. Secondly, it only addressed the issue of study habits and street hawking, but the current study considered a wider range of hawking activities.

Another study was conducted by Ijadunola et al. (2015) to find out the determinants, patterns, and effects of street hawking on the performance of in-school adolescents. In the study, Ijadunola et al. (2015) used a sample size of 435 teenagers and a questionnaire as the sole data collection method to establish that the adolescents who participated in street hawking were more likely to fail their exams than those who did not. The study was critical to the current research because it uses a quantitative approach to use teenagers as the respondents to compare the effect of hawking on the academic performance of students who partake in it and those who do not. The recently completed study reduced the shortcomings of this research by conducting it in a new location, Ugunja Sub-County, Kenya. The findings of Ijadunola et al.'s study were echoed by Kaletapwa and Yumbak (2013) in their research on the effects of street vending on academic performance in agriculture, especially paper 3 (practical), in secondary schools in Taraba State. The research established that students who participated in street vending activities performed poorly in practical agriculture. This study provided critical information that points toward the current study's findings.

A study by Ampomah (2012) to establish the effects of child labour in hawking (which the author calls (petty trading) in Ghana also supports the findings from the above studies. In this study, Ampomah (2012) established that most school-going children who took part in hawking could sometimes miss classes and drop out of school. However, those who try to juggle their school work with hawking could enrol late, achieve low grades, repeat classes, and even miss classes. This study was relevant to this research because it uses a mixed-approach research design, unlike the current one. The research also used purposive sampling to select three population demographics as participants (parents, children, and government officials). However, the research was conducted by Ampomah in the Ga East District, which has no geographical and demographic similarity with Ugunja, the current study area. Finally, the just-concluded study uses educational institutions as the primary environments from which the raw data is collected, contrary to the previous studies.

Another study conducted by Senna (2022) to investigate the effect of street hawking on the education of young female hawkers in the Volta region of Ghana found that many female hawkers cannot attend school regularly and perform poorly. In descriptive research involving interviewing and observing 60 adolescent schoolgirls who engage in hawking activities, Senna (2022) outlined that such students engaged in hawking activities because they needed to pay their school fees, provide their basic needs, and assist their parents. This source was critical to the just-completed study because it was a pointer towards the result of the study. However, the study does not reveal the strength of the relationship between the independent and the dependent variables. Additionally, the interview and observation were inadequate in bringing out dependable results, and the two could present possible researcher biases, making the current study worth taking. Additionally, Senna (2022) only used girls as the respondents and target population, thereby sidelining the boys, a weakness that required an immediate gender intervention study. This is the gap that the just-completed study has filled.

III. METHODOLOGY

3.1 Research Design

Creswell and Creswell (2022) describe research design as the elaborate process of collecting, analysing and interpreting data to make meaning out of them. This study was executed through a descriptive survey research design. The data that were used to test the research hypothesis were collected through structured questionnaires and a Document Analysis Guide. This design was deemed appropriate for the study for the following reasons. Firstly, it was cheaper and faster to execute than other designs (Oyugi et al., 2023). Secondly, the design also describes the phenomenon without manipulating the respondents, an aspect that is not possible with other designs (Achoka *et al.*, 2018). The study involved a sample size of 306 public day secondary school students who engage in hawking activities.

3.2 The Target Population

Target population refers to a group of people, objects, or animals pertinent to specified problems and of the researcher's interest. As such, the study's target population was all the 1498 public day secondary school students who participated in hawking activities in Ugunja Sub-County, Kenya. These students were targeted because they were best placed to provide the necessary information to address the research problem.

3.3 Sampling Techniques and Sample Size

The study used the formula set by Krejcie and Morgan (1970) to determine the sample size from the target population. The formula is hence;

$$S = \frac{X^2 NP(1 - P)}{d^2(N - 1) + X^2 P(1 - P)}$$

Where:

X^2 = the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841),

N = the target population

P = the population proportion (assumed to be .50 since this would provide the maximum sample size),

d = the degree of accuracy expressed as a proportion (.05)

When the researcher substituted N with 1498, and the result was rounded to the nearest whole number, the S (sample size) was 306 public day secondary students who engaged in hawking activities in the study area. Based on Krejcie and Morgan's (1970) assertion, the sample size was sufficient to represent the target population.

3.4 Research Tools

This study utilised two research methods, a structured questionnaire and a Document Analysis Guide, to collect raw data from the respondents. The former was used to collect the data related to the independent variable, while the latter was used to collect the data on the dependent variable.

The questionnaire had two parts: the introduction and part B, which had 15 positively worded statements and a 5-point Likert scale with Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD) to seek information on hawking activities that the respondents participated in. This tool was deemed appropriate because engagement in hawking activity as an economic activity by students is a sensitive matter that requires a self-reporting tool. Secondly, the administration of the questionnaire made it possible to reach a relatively large number of respondents as opposed to the other tools that would have been used. Another reason for using the questionnaire is its ability to save both time and resources as it is administered within a shorter timespan compared to other data collection tools (Oyugi et al., 2023). Finally, the instrument made it easier for the respondents to respond to the statements without being interfered with, an aspect which would not be possible with either an interview or observation schedule.

The Document Analysis Guide (DAG) was the second tool used in this study to collect information on students' academic performance from the reports of termly examinations. Apart from the background and introduction, the DAG has a table that was filled using the students' scores for the last three years to determine their trend in performance as they engaged in different hawking activities. The information was obtained by scrutiny of the learner progress records obtained from the schools' Director of Studies (DoSs). To ensure their accuracy, the researcher filled this document in person.

3.5 Data Analysis

Data analysis can be described as the process of synthesising raw data and interpreting the results to produce meaningful information (Mugenda & Mugenda, 2003). This study gathered quantitative data through the questionnaires and DAG. The data were first analysed descriptively using Statistical Package for Social Sciences (SPSS) Version 23 through descriptive statistics such as means, percentages, and standard deviations. The research hypothesis was tested statistically using inferential statistics through Bivariate Pearson's Correlation at a 0.05alpha level of significance.

IV. FINDINGS & DISCUSSION

4.1 Demographic Data

Generally, the age of secondary school students ranges between 14 and 17 years. However, some students are also above or below this age bracket due to different factors, like the age at which they began their education, among others. Therefore, this study assessed the students' participation in hawking activities by gender and age because this economic activity is gender and age-dependent. The results of demographic information of these students is displayed in *Table 1*.

Table 1
Age and Gender of Participants

Age	Female		Male		Total	
14-16	7	(15.36%)	7	(28.43%)	134	(43.79%)
17-19	5	(21.24%)	5	(31.05%)	160	(52.29%)
Over 19	7	(2.29%)	5	(1.63%)	12	(3.92%)
TOTAL	119	(38.89%)	187	(61.11%)	306	(100%)

The table reveals that of the 306 respondents, 119 (38.9%) were female, while 187(61.1%) were male. Generally, there are more males than females in hawking activities. The table further shows that 134 (43.8%) respondents were between 14 and 16 years, 160 (52.3%) were between 17 and 19 years, and 12 (3.9%) were above 19 years. This shows more males than females, while most respondents were in the 17-19 age bracket.

4.1.1 The Rate of Return of the Research Tools

The rate of return of the two research tools was also calculated to determine if any research tool was wasted or if the research assistants were inefficient to the extent of failing to collect all the research tools. The results of the calculation indicated that there was no missing research tool after the data collection process. This positive observation was especially so because both research tools (questionnaire and DAG) had maximum possible return rates of 100%. This important milestone was achieved due to several measures the researcher implemented. These included (i) the researcher and research assistants' physical presence to supervise the whole data collection exercise and address any challenges that demanded their immediate attention, (ii) the researcher's effective sensitization of respondents on how important their responses were formulation and implementation of any policies in the future, (iii) production of coloured copies of these tools which made them attractive, (iv) use of sufficient and effective research assistants who were able to reach every respondent, and (v) careful collection, package, and safe custody of all the research tools.

4.1.2 The Rate of Completion of the Research Tools

The completion rate was also calculated to establish whether the respondents responded to all the items in the research tools administered before they were returned. It was also done to see if significant amounts of data were lost during the study. The completion rate was calculated by dividing the count of completely responded-to items in each research tool by the total count of the corresponding items in the tools. The quotient of this division was then multiplied by 100. Therefore, the completion rate of the DAG is 100%, while the questionnaire is 98%. This shows that the DAG completion rate was higher than the questionnaire. However, both were relatively high, showing that significant data were lost during the data collection process. Scientific inquiry has reached a momentous milestone with the discovery of this phenomenon (Fan & Yan, 2010). The researcher successfully attained this milestone by implementing a variety of precautions to prevent data loss. These include (i) assuring the respondents of their anonymity by using pseudo names instead of their actual names, (ii) assuring them of confidentiality of the information they provided before the data collection, (iii) producing coloured and attractive copies of the tools, (iv) allocating sufficient amounts of time that most respondents needed to respond to all items in each research tool based on the observations the researcher made from the pilot study, (vi) clearly articulating the importance of the study beforehand to the respondents, (vii) providing clear and simple instructions on how to fill each part of the tools, and (viii) using language that is commensurate to the respondents' level of education and avoiding jargon, which would discourage them from participating in the process.

4.1.3 Participation in Hawking Activities

The main objective of this study was to assess the relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya. To fully address it, several descriptive analyses were performed on data collected by the questionnaire to establish the trends and patterns and explain the observations made in the quantitative data analysis. Table 2 presents a summary of the responses of the sampled respondents from the questionnaire.

Table 2*Summary of Responses on Hawking Activities*

Statement	SA	A	U	D	SD	Total
I engage in selling fruits and fruit salads	96	77	1	66	66	306
I hawk blended juice	107	92	0	47	60	306
I vend soft drinks	95	78	0	65	68	306
I sell vegetables, onions, and tomatoes	101	75	0	67	63	306
I sell second-hand clothes	92	81	0	60	73	306
I sell utensils	101	75	0	67	63	306
I sell second-hand shoes	92	81	0	60	73	306
I sell hot and cold coffee	100	73	0	69	64	306
I sell snacks	83	95	0	61	67	306
I sell tea	94	78	0	77	57	306
I sell electronics and their accessories	76	98	0	66	66	306
I deal in jewellery	91	79	0	75	61	306
I hawk pesticides	99	80	0	59	68	306
I hawk stationery	94	83	0	57	72	306
I hawk beauty products	100	75	0	65	66	306

From the table, the respondents were provided with a total of 15 statements in the questionnaire, with the responses ranked on a Likert scale of five points (Strongly Agree (SA), Agree (A), Undecided (U), Disagree (D) and Strongly Disagree (SD)). As the table indicates, most of the sampled students were affirmative of the statements in the questionnaire, which implies that they indeed participated in some or all of the hawking activities mentioned in the questionnaire. Additionally, of all the hawking activities the respondents participated in, the highest number, representing 34.9%, was hawking blended juice. This was followed by 33% for selling utensils, vegetables, onions, and fruits. At the same time, the statement with the least number of students' affirmations (strongly agreed) was selling electronics and their accessories. Additionally, none of the respondents scored Undecided (U) except 01 (I engage in selling fruits and fruit salads).

4.1.4 Academic Performance

The study went on to investigate the academic performance of the students. The findings were presented in Table 3.

Table 3*Summary of Average Academic Performance based on age*

Age	Frequency	Average Score	Standard Dev.
14	33	41.69	8.14
15	59	35.39	8.37
16	44	31.59	7.11
17	48	28.5	4.89
18	85	24.49	2.71
19	27	19.68	4.04
20 and above	10	15.87	2.68

Source: Field Data

From Table 3 above, students of age 14 years had the highest average score of 41.69, which means they performed the best averagely. Additionally, the score also had a moderate variation since the standard deviation was 8.14. This means that most students within and around 14 years of age performed better and their distribution score was moderate. This performance sharply contrasted with the students above 20 years who were 10 and had an average score of 15.87 with a standard deviation of 2.68, and showing the lowest score with the lowest variability. This average score and standard deviation show that most of the students in this age group recorded low academic performance. Generally, the observable trend here is that the more the students advanced in age, the low their academic performance became.

4.2 The Relationship between Hawking Activities and Academic Performance

The students' scores in Hawking Activities and academic performance as measured by the questionnaire and the DAG were descriptively analysed to generate Means and Standard Deviations (S.D). The outcomes here were mean and standard deviations for the hawking questionnaire were 87.86 and 3.2085, respectively, while the mean scores and standard deviation for their academic performance were 29.39 and 8.9395.

This study's objective was to assess the relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya. Based on this objective, the null hypothesis (H_{01}) of this study was formulated as follows:

H_{01} : There is no statistically significant relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya.

Bivariate Pearson's Correlation (BPC) was used to test this null hypothesis at a 95% confidence level. This inferential test was implemented by correlating all the sampled students' scores in the questionnaire as the independent variable and their academic performance scores captured in the DAG as the dependent variable. The results of this analysis are displayed in Table 3

Table 3

Correlation between Hawking Activities and AP

Variable	Hawking Activities Participation Score	AP Score
Hawking Activities Participation Score	-	-0.584*
AP Score	-0.584*	-

* $p = 0.008$, $\alpha = 0.05$

It can be observed from the table that there was a moderate negative association between students' participation in hawking activities scores and their academic performance scores [$r = -.584$, $p = .008$ at $\alpha = .05$]. The association was classified as "moderate" because Pearson's correlation coefficient between the obtained questionnaire and DAG scores is situated midway between 0 and -1. The table further reveals that the sign of the correlation coefficient (r) is negative, which implies that a respondent who obtained high scores in the questionnaire recorded low scores in the DAG and vice versa. These inferential statistics provide evidence that refutes the assertions of the null hypothesis. For this reason, H_{03} was rejected. Alternatively, it can be asserted that students' participation in hawking activities has a statistically significant influence on their academic performance in public day secondary schools in Ugunja Sub-County, Kenya.

The findings of this study with respect to the objective and statistical testing of the null hypothesis revealed that there was a moderate negative correlation between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County. In contrast to the expectations expressed in the null hypothesis of this study, the analysis revealed a statistically significant association with a significance level of 0.05. Students who participated in hawking activities in the research area exhibited poorer academic performance than those who engaged in less of the same (or vice versa), as indicated by the negative value of the correlation coefficient. To this end, it can be deduced that participation in hawking activities negatively affected the students' academic performance in the research area. These results could also be attributed to the fact that students found connecting selling blended juice, selling utensils, vegetables, onions, fruits, and selling cold and hot coffee as the hawking activities that were either easier to do, had no strict legal requirements or promised higher rates of income since the activities that had the greatest number of participants. It also implies that because other hawking activities such as selling fruits and fruit salads, vending soft drinks, selling second-hand clothes, selling utensils, selling second-hand shoes, selling snacks, selling tea, selling electronics and their accessories, dealing in jewelry, hawking pesticides, hawking stationary, and hawking beauty products, also received some participants scoring strongly agree and agree, they equally have a significant relationship with their academic performance. This revelation confirms that these students participate in hawking activities, which are negatively associated with their academic performance. It could also be argued that the three had the greatest effect on students' academic performance in public day secondary schools.

Furthermore, this correlation was deemed statistically significant because the p -value corresponding to the calculated correlation coefficient acquired through BPC was smaller in magnitude than the specified alpha value. These results are consistent with those of Paul et al. (2019), whose research examined the impact of street vending on adolescents' academic achievement in the Wukari Metropolitan Area. According to their research, peddling negatively impacted academic achievement. However, while the present study used 306 students, Paul et al. (2019) used a smaller sample size of 100 teenagers to determine the effects of street vending on their academic performance.

The findings of the just-concluded study are also supported by Oluwagbohunmi (2019), whose study was descriptive and involved a sample size of 180 students and respondents. The study by Oluwagbohunmi (2019) found that students who participated in hawking activities exhibited poor academic performance due to poor study habits. The

scholar also explains that street hawking risks the lives of school-going students mentally and physically. Oluwagbohunmi (2019) collected data using questionnaires and social studies achievement tests, which could be equated to the document analysis guide for the current study. Although the findings agree, the present study used a relatively larger sample size.

Another study whose findings support those of the current research concerning the objective is that by Ijadunola *et al.* (2015), who found the patterns, determinants, and effects of street hawking on the school performance of in-school adolescents. In the study, Ijadunola *et al.* (2015) used a bigger sample size of 435 adolescents and a questionnaire as the sole data collection method to establish that the adolescents who participated in street hawking were more likely to fail in their exams compared to their counterparts who did not. The major concern about the study by Ijadunola *et al.* was that they used self-reporting tools to capture data on academic performance, yet there are more reliable tools that can capture information on academic performance, like document analysis guides, as was done in the present study.

Another study that supports this study's findings is by Kaletapwa and Yumbak (2013), who investigated the effects of street hawking on academic performance in practical agriculture in secondary schools in Taraba state, Nigeria. However, the study focused on academic performance in practical agriculture; hence, the findings cannot be generalised to other curriculum subjects. The present study used all subjects in the curriculum in the schools that were used.

Finally, the study is supported by Senna's (2022) study, which investigated the effect of street hawking on the education of young female hawkers in the Volta region of Ghana and found that many female hawkers cannot attend school regularly and perform poorly. In descriptive research that involved interviewing and observing 60 adolescent schoolgirls who engage in hawking activities, Senna (2022) outlined that such students engaged in hawking activities because they needed to pay their school fees, provide their basic needs, and assist their parents. This source was critical to the just-completed study because it was a pointer towards the result of the study. However, the study does not reveal the strength of the relationship between the independent and the dependent variables. Additionally, the interview and observation were inadequate in bringing out dependable results, and the two could present possible researcher biases, making the current study worth taking. Additionally, Senna (2022) only used girls as the respondents and target population, thereby sidelining the boys, a weakness that required an immediate gender intervention study. This is the gap which the just-completed study has filled.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The main objective of this study was to assess the relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya. From the empirical evidence arising from the analysed data in this descriptive survey research and the inferential statistical analysis that involved testing of the null hypothesis, the study concludes that there was a strong negative relationship between students' participation in hawking activities and their academic performance in public day secondary schools in Ugunja Sub-County, Kenya. These results emphasised that more students engaged in selling blended juice, selling utensils, vegetables, onions, fruits, and selling cold and hot coffee as the hawking activities than the others because they were either easier to do, had no strict legal requirements or promised higher rates of income.

5.2 Recommendations

The study recommends that the Ministry of Education should increase the capitation towards funding public day secondary schools so that students from poor backgrounds do not absent themselves from school to engage in hawking activities. Due to the multifaceted effect of students' engagement on hawking activities, both the Kenyan Ministry of Interior and the County Government of Siaya should conduct public awareness through community groups, chiefs' barazas and other avenues to sensitise parents and guardians to discourage their children from engaging in hawking activities. The two should also be strict on the age limits for hawking and other economic activities that attract the attention of school-going children and crack down on the students who absent themselves from school to engage in hawking activities.

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