

Research Article**THE EFFECT OF SCHOOL LOCATION ON PUPILS' PARTICIPATION IN ACADEMIC ACTIVITIES:
THE CASE OF DANSOKROM PRIMARY SCHOOL IN THE BIA WEST DISTRICT OF GHANA*****Jennifer Martrah and Samuel Mojom**

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Abstract

The study sought to ascertain the effects of school location on the academic activities of pupils of Dansokrom Primary School. The study adopted the descriptive research design with the use of a survey instrument administered by the researchers in-person to 65 participants selected through the multi-stage sampling techniques. Data collected was handled quantitatively with the aid of the Statistical Package for Social Science (IBM SPSS v.21) within the Positivists research paradigm. The study established that, the location of Dansokrom primary school has negative effect on the academic activities of the pupils which manifests in their rampant lateness to school to participate in morning assembly sessions, inability to partake in early morning lessons, and to a minimum extent, discourages most of them to get involve in school sporting/cultural/march pass activities. The research findings serve as empirical guide to the Ghana Education Service and government in general in making informed decisions on siting community-based schools. Since most of the pupils find it difficult accessing the school facility as a result of its long distance from their homes, the study recommends to the government through the Bia West District Assembly to construct motorable roads to the adjoining farming communities of Dansokrom to allow for the use of tricycles, motorbikes and bicycles as well as other readily available means of transporting the pupils to and from school.

Keywords: School location, Effect, Academic activities, Pupils, School environment, Bia West district.

INTRODUCTION

The school is considered to be a social institution established with the rationale of developing and nurturing the skills of the individual so as to position mankind to face the challenges of society and to contribute meaningfully towards its advancement. Education which is purported to be the bedrock of individual and national civilization and development, has received the financial attention of most governments across the globe relative to its accessibility and quality (Adu-Gyamfi *et al.*, 2016). Ghanaians have not been left out in this knowledge acquisition venture and as such, pushed almost all regimes of the pre-independence and the post-independent era to introduce and to consolidate formal education in both the urban and rural areas with the underlining principle and aspirations of preparing the citizenry for the contemporary world (Ministry of Education, 2008). Primary education forms an integral part of the national educational system as it is considered to be the foundation block in one's educational journey whose quality predicts and influence the standard of the second cycle and tertiary education. Likewise, the level of literacy in the country as a whole (Mhiliwa, 2014). This notwithstanding, it is generally observed that, schools in most developing countries in Africa are not equally rated in terms of site locations, facilities available, the caliber of pupils frequenting them, quality of teachers and even curricular contents. Pascarella and Terenzini (1991) authoritatively attribute students' engagement in school activities and their eventual academic outputs to the nature of school environment. A school located in a rural area, they argued, will depict the tenets of a rural environment; likewise, an urban-based school will have environment-based activities peculiar to its environment.

Thus, as the school environment differs, the level of academic performance may also differ (Mhiliwa, 2014). A study by Walberg (1992) cited by Mhiliwa (2014) concluded that, there exist a positive correlation between school variables such as class size, teacher-pupil ratio on one hand, and pupils' class participation and academic outputs on the other hand. Botswana has also not been spared of the hard-blow of poor location of public schools, as the study conducted by Baliyan and Khama (2020) on 168 students and their performance in Mathematics, clearly revealed that, long distance covered to school had a negative impact on performance, hence, establishing a direct relationship between location of school and academic performance. He made a corresponding recommendation that, schools should be located close to the end users. It is against this background that, the researchers, being passionate about educational attainment, particularly at the basic level, seek to conduct an empirical study to investigate the effects of school location on the academic activities of pupils in Ghana, with Dansokrom Primary School in the Bia West District of the newly created Western North Region, as the case study.

Statement of the Research Problem

Education has been widely touted as the bedrock of societal growth and for that matter, has attracted the policy attention of governments across the globe particularly, in most democratic regimes which esteem the literacy of the citizenry as a prerequisite for the consolidation of any democratic gains chalked (Asiedu-Akrofi, 1978). The call for universal attainment of some form of education as one of the seventeen goals of the United Nations (UN) through its agencies such as the United Nations Educational, Scientific and Cultural Organization's (UNESCO) vision 2030 (UNESCO, 2015), cannot be realized should primary level (Basic school)

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education which arguably, is the solid foundation upon which higher educational attainment dwells, be neglected by educational policy actors, hence, the need to strive for near-equality in the nature of schools children are enrolled in (Peteros *et al.*, 2022). It is strongly argued by Ibok (2015) in his work on school location that, schools located in affluent centers come with the necessary facilities such as electricity, good drinking water, block-and-mortar edifice as well as accessible road networks leading to and from the school to adjoining communities. However, same cannot be reported about community-based schools sited in remote and/or less endowed areas of the same country. To this end, the author concluded that, the selection of the place to situate schools, have a bearing, if not negative, on the academic engagement of the pupils enrolled in such village schools.

The choice of geographical locations for the sitting of schools meant to serve the academic and other social needs of the populace, has been considered by Mbipom (2000) to be a major decision that affects the school throughout its existence and operation and as such, should be treated very seriously during feasibility studies, contract bidding, award and execution phases of the school building project. These must be devoid of all political, communal, groups and personal sentiments. Ntukidem and Etor (2001) further highlighted this by proposing that, in the choice of places to situate public schools, particularly, those targeting the Preschool, Creche and the Primary (Basic School) categories, policy makers and contractors should dedicate ample time and energy to adequately examine the nature of the soil, the prevalent climate relative to the location and construction of buildings and other auxiliary structures of the school to help extend the shelf life of the project.

Akhtar (2012) as cited by Baliyan and Khama (2020) maintained that, effective schools must be situated in places that would require an estimated walking distance of about five to thirty minutes. However, most developing countries in Sub-Saharan Africa, have either ignored this entirely in their educational policy reforms or are unable to appropriate this truism due to inadequate financial resources, lack of technical know-how and/or deliberate attempt to deepen the lines of difference between the haves and the have-nots (Baliyan & Khama, 2020).

Pupils staying very far away from school sites would have to travel long distances to have access to the facility and its academic services. Baliyan and Khama (2020) opined that, there are two modes of travel available to the students namely; the passive mode which entails the use of motor transportation means such as vehicles, motor cycles and even locomotive trains; and the active mode which involves trekking and the use of bicycles by students and teachers. No matter which of the modes utilized by students, Onderi *et al.* (2014) established that, innocent pupils who have to cover long distances on foot, report to school late. They also get back home from school late and become exhausted, leading to poor concentration on school activities, encourage absenteeism and school drop-outs (Moyo, 2013; Taiwo, 2019). A study conducted in Philippines by Waswa (2015) concurs that, students walking long distances from home to school are unable to complete their outside school activities like take-home assignments, reading tasks and personal studies, since they spend most of their quality time and energy trekking.

In Ghana, just as prevalent in other West African countries, most community-based schools are seen to have been situated in areas far away from the bulk of the intended users (Awudu, 2014). The schools have poor ratings when it comes to infrastructural growth, often times sited in areas that are not proportionate in proximity to both residents inside the town and those living far away in hamlets and cottages. This therefore requires pupils, teachers and other stakeholders to walk several miles to get access to the facility

Gyamfi and Pobbi (2016) in this direction, intimate that inasmuch as the budgetary allocation on education keeps increasing year by year, it does not translates into the achievement of quality education. Dankwa (1997) accordingly attributed the continues fall in the academic performance of students in Ghana, to poor infrastructure, unwillingness of trained teachers to accept postings to certain community-based schools as well as the desperate location of schools far away from the people. Schools that are mostly sited in remote areas are starved of relevant textbooks, adequate classroom infrastructure and normally exhibit poor environment which demotivate both students and teachers (Adu-Yeboah, 2002; Ankomah *et al.*, 2005).

The government of Ghana through the Ministry of Education and the Ghana Education Service (GES) has chalked countless successes in improving upon the literacy rate of the citizenry. However, unresolved lapses in the educational administration such as lack of effective supervision and monitoring in schools, lack of motivation for teachers and the inadequacy of qualified teachers in most schools, are gradually eroding the success story (Adu-Gyamfi *et al.*, 2016; Anamuah-Mensah, 2010).

Ofofua (2013) conducted a study on factors affecting low academic achievement of pupils in Kemp Methodist Junior High School in Aburi and concluded that, school environmental factors such as the limited number of trained teachers, inadequate teaching materials and incessant lateness to school, dominated. In the same vein, Dansokrom D/A primary school being the only educational unit in the cottage has also been bewildered with poor classroom infrastructure as stated by the Bia West Education Directorate (Ghana News Agency, 2021). According to the 2021 report of the Bia West District Assembly on education, there was an increase in school drop-out rate in most remote schools which is partly attributed to parents sending their wards to the farm during and after the COVID-19 mandatory lockdown periods (Ghana News Agency, 2021). This notwithstanding, there is no empirical data available on Dansokrom D/A primary school in the current literature to guide authorities to measure the impact of the location of the school on the pupils. Hence, the imperative of our work to fill this knowledge gap and to further enrich the local literature by expanding the scope of discourse on school location and school environment to cover their corresponding effects on pupils' participation in academic activities.

Objective of the study

The main objective of the study is to ascertain the effects of school location on the academic activities of pupils in public primary schools in Ghana, using Dansokrom Primary School in the Bia West District as the study area.

Scope of the paper

Considering the numerous challenges facing the educational sector of in Ghana, laborious research work across the state is required to encompass all the relevant variables. However, this paper is limited to ascertaining the effects of school location on the academic activities of only the pupils of Dansokrom Primary School situated in the Bia West district of the Western North Region. It is further narrowed to solicit for information from the pupils (from class 4 to class 6), teachers and immediate parents/guardians who have their wards enrolled in the school. The researchers consider these categories to be the prime stakeholders interested in the academic activities of the community-based school, rather than including all the people of Dansokrom community. The paper mainly comprises five sections namely, introduction and problem statement; theoretical and imperial literature review; materials and methods; research findings and discussions; and conclusion, study impacts as well as policy recommendations.

LITERATURE REVIEW

This section of the paper makes a detailed presentation of both theoretical and empirical works available in the literature. The section is divided into two namely, the theoretical framework and the empirical literature.

Theoretical Framework

Inasmuch as individuals strive to attain the heights achieved by others, they rather differ in terms of how, when and where such feats are attained. The child in this contemporary era, is said to have a unique thing that propels him/her towards the attainment of any pre-set aspiration, of which, some might be informed by the environment whereas others are inherent. To better situate our study on the effects of school location on the activities of students, the Self-Determination Theory (SDT) propounded by Deci and Ryan (1985) is adopted to help measure the inherent factors driving the pupils forward in their educational journey.

The Self-Determination Theory (SDT) was first introduced in the 1970s and 1980s research works of Psychologists Edward L. Deci and Richard M. Ryan, on motivation and was expanded in terms of its basic attributes in their book entitled 'Deci and Ryan's Theory of Motivation' (Ackerman, 2018). According to the authors, SDT establishes a linkage between personality, motivation and functionality. It summarizes that, the intrinsic and extrinsic motivation forces are equally powerful in defining who an individual is and how he/she behaves (Deci & Ryan, 2008). The extrinsic motivation drives a person to behave in a manner hinged on external forces which result in rewards emanating from the outside such as the grades earned in school, appraisal at the workplace and commendations received from others. The extrinsic factors thereby limit the individual to conform with the standards set by others. On the contrary, the intrinsic motivation force is inherent in the person which informs and directs particular behaviour of which, Deci and Ryan (1985) enumerated as one's core values/beliefs, sense of morality and the aspirations of individuals which really define the ideal self. Pupils enrolled in most community-based public schools are motivated by several factors both intrinsic and extrinsic and as such, the study crafted a salient objective of identifying the factors that motivate pupils of Dansokrom primary school, to strive

towards the attainment of their academic aspirations. The SDT has been considered by Mhiliwa (2015) as working to highlight the motivation level of learners with its prime focus on how instructors/teachers would discover the interest level of students, what motivates and what demotivates them as well as how to sustain and transform learners into becoming self-motivated students. Certain individuals are extrinsically motivated by what they see, listen, touch and even feel and thereby requiring teachers to effectively harmonize rewards and punishments to instill the values of education in their students (Mhiliwa, 2015). Proponents of the Self-Determination Theory maintained that when the inherent needs of the learner are attained, the achievement leads to a change of behaviour which is termed, autonomous striving. Again, when learners are motivated mainly by the actions and inactions of others, they turn to live a controlled life so as to be accepted and respected by those who set the standards (Deci & Ryan, 2008). Hinging on the SDT, it is very salient for educational policy framers and implementing agencies to factor-in the motivators and hygiene factors that make up the environment of learners.

Motivation, learning and teaching from the perspective of SDT: Inasmuch as lessons are to be planned and delivered by instructors to learners in unison, exponents of the Self-Determination Theory enjoin instructors to identify the basic psychological needs that underline the extent to which a learner is motivated to learn (Anderman *et al.*, 2015). It is contended that, students who are intrinsically motivated do well to complete their homework when their immediate psychological needs are met. These students are autonomous and are self-determined to achieve their aspirations with or without any reward or punishment from the environment. On the contrary, extrinsically motivated students normally concentrate on building up their relatedness and thus, would initiate learning actions if that will receive the commendation of others (Katz *et al.*, 2014). Deci and Ryan (2008) emphasized on the autonomy, competence and relatedness of the individual which translate into the ability to do things for self-fulfillment and to achieve heights without relying on others; believing in oneself towards accomplishment; and being accepted and cherished by others respectively. Pitched on these three tenets, our current study seeks to identify the motivation factors that drive the pupils of Dansokrom primary school towards the attainment of their academic aspirations relative to the school's location and environment.

The advent of formal education in Ghana

Formal education is considered to be the model of learning carried out in established institutions such as schools and colleges with well-crafted programmes, curricula and time schedules under strict supervision, where achievements are often recognized by the award of certificates (Oti-Agyen, 2007). It is argued that communities in Ghana have their unique way of getting indigenes educated, being it an art of literacy or practical vocation (apprenticeship) which makes it informal (Akorli & Gyamfi, 2021). Western education in modern Ghana was closely linked to the advent of European merchants in the Gold Coast in the Fifteenth Century of which, the Portuguese who arrived in the Gold Coast in January 1471, were the premiers. The European merchants instituted measures to provide formal education to the Gold coasters so as to facilitate their merchandising activities (Oti-Agyen, 2007). The author maintained that, the premier school was

established by the Portuguese at the Elmina Castle in 1529 solely to educate the Mulattos and sons of other indigenous wealthy merchants. Upon the takeover of Gold Coast trading by the Dutch, education for the Mulattos continued under then Governor Major de Richelieu in 1722. This school eventually came to be called 'Cape Coast Government Boys School' which was handed over to the Cape Coast Municipal Council in 1956 under the auspices of the Anglican Church (Oti-Agyen, 2007).

Primary school education in Ghana: Primary school education has been part of the educational system of Ghana since the inception of formal education in 16th Century to help develop the child for the higher levels (Adu-Gyamfi *et al.*, 2016). It comprised of a six-year model categorized into two sub-phases namely, the 3 years lower primary and the 3 years upper primary imbedded into classes 1-3 and classes 4-6 respectively. Jophus Anamuah Mensah in his 2007 committee report maintained that, the stages in the primary school system aid in the knowledge acquisition, skills development and the satisfaction of curiosity of the child (Adu-Gyamfi *et al.*, 2016). Pertaining to the rationale for introducing primary school system, the committee indicated that it helps in the development of sound moral habits and inculcation of cultural heritage and identity in the Ghanaian child; instill patriotism in children for national development; teach them to understand healthy lifestyles; lay the foundation for inquiry and to develop their creative and innovative minds (Jophus Anamuah Mensah 2007 Committee Report, cited in Adu-Gyamfi *et al.*, 2016).

Empirical Literature

This section seeks to explore and present detailed discourse on existing research findings on school location and its resultant influence on school achievement. The rationale for this section to help the audience to appreciate the topic under study as well as present a nuance of current study in the Ghanaian setting.

Impact of school location on academic achievement

The geographical location of schools is a salient factor to consider because the distance covered by students and teachers contributes to their motivation level in the teaching and learning process. Engelbrecht *et al.* (1996) revealed that, distance covered by students from their homes to the school correlated positively with their academic performance. The authors established that, majority of the students covering long distances to school spend most of their quality time trekking rather than learning. Owoye and Yara (2011) also maintained that, where a school is located greatly impacts students' academic performance. They observed that schools situated in rural areas are normally affected by improper school mapping, inaccessible roads and lack of motivation of students from villages to attend school. Trekking over long distances to and from school results in frequent late coming. Studies show that longer walking distances lead to fatigue, hunger and drowsiness of students whiles in class (Moyo, 2013). Adeboyeje *et al.* (2003) found home-to-school distance as one of several factors that causes poor achievements of students in examinations. Other leading factors were poor location of schools, frequent policy changes, poor supervision, monitoring and evaluation mechanisms, and inadequate textbooks as well as non-conducive school environment. Onderi *et al.* (2014) concur that, trekking long distances to school normally make students come to class late and with empty stomachs which

negatively impact their classroom participation. In this direction, Matingwina (2018) opined that after-school activities of the students are also affected by the long distance covered. He continued that, students find it quite difficult to focus on their private studies at home and to complete their take-home assignments due to fatigue. Jovinius (2015) in his empirical study establish that, poor location of six schools in Muleba district in Tanzania caused students' absenteeism, early marriage and early pregnancy. The study concluded that the geographic location of the sampled schools have direct influence on students' performance. Based on the aforementioned theoretical and empirical literature on the relation between school location and students' performance, this current study seeks to expand the discourse to cover the effect of school location on pupils' participation in core academic and extra-curricular activities. The extant literature has dealt extensively with the secondary cycle institution. However, little empirical work has been done on the basic school education as well as localizing the discourse in the Ghanaian setting, hence, the imperative of our work to fill the knowledge gap.

Conclusion

The literature reviewed have a good bearing on the entire research work as it has empirically established the relationship between school location and students' performance, school environmental factors and their corresponding impacts on students' performance across the globe. It has however, done little about the effects of these variables on students' participation in school activities, and most specifically, the current literature revolves around the secondary schools to the neglect of the primary school (Basic school) which forms the bedrock of the academic ladder. To this end, our work on the effects of school location on the academic activities of pupils of the Dansokrom Primary School, is pertinent to fill this knowledge gap in the extant literature.

MATERIALS AND METHODS

This section makes an elaborate presentation on the methodology and strategies adopted in the design, data collection and analysis process of the entire study. The study followed the rigorous scientific process which allows for verification by other researchers.

Research design and approach

Research design refers to the conceptual blueprint within which research is conducted (Akhtar & Islamia, 2016). The study adopted the descriptive research design to help describe the characteristics of the phenomenon under study. Descriptive design actually concerns itself with describing what is happening rather than telling why something happens as it is with the explanatory or experimental designs. The descriptive design was chosen over other research designs because it aided in presenting a clear picture of the phenomenon under study through fact finding, by provide accurate information aimed at achieving the research objectives. The descriptive design is viewed as a survey approach in which data is collected about a given phenomenon to answer questions concerning the current or present status of the phenomena under study and helps to define the characteristics of a specific population (Gay *et al.*, 2012). Observation and survey tools are often used to gather data in this design which is usually analyzed quantitatively

with the help of frequencies, %ages, averages, and other statistical methods to determine relationships between variables (Nassaji, 2015). The quantitative method was utilized to collect data to answer the research questions with the aid of a field survey tool known as questionnaire. The quantitative approach involves quantifying and analyzing variables in order to get results and to also reduce variables into values so as to perform statistical analysis (Apuke, 2017). According to Kothari (2004), the quantitative method is applicable to phenomena that can be expressed in terms of quantity and numbers. The quantitative method makes good use of the conventional arithmetic and statistical methods in measuring research outcomes. Harwell (2011) observes that, the quantitative research method provides an enhanced objectivity and generalizations with regard to its findings. The quantitative method was deployed because it brings objectivity to data collection and analysis. It is in line with this that, in drawing the distinction between the quantitative and qualitative method, Johnson and Christensen (2008) argue that, in conducting quantitative research, objectivity is key. Moreover, quantitative data are based on precise measurement because the researcher uses structured and validated data-collection instruments. The quantitative method is also relatively less rigorous and also enhances easy understanding of research findings, hence its adoption in our current study.

Data Collection and Sources

The study utilized both primary and secondary data to understand the phenomenon under study. The study collected first-hand data from sixty-five (65) respondents with the aid of a crafted survey questionnaire which comprised mainly of closed-ended questions of which, respondents were required to select from among multiple options applicable to them as well as express their level of agreement or disagreement on stated items modeled along the four-point standard Likert Response Scale. A review of relevant books, published and unpublished theses on the impact of school location on academic activities, students' participation and academic performance of student and other related articles, served as the secondary data for the study. The study utilized field survey questionnaires over other research tools such as quasi-experiment, test, in depth-interviews and phone surveys because of its capability to reach out to several participants within a researcher's limited resources and also increase the response rate for reliability (McLeod, 2018). It offered enough room for the researchers to personally administer the survey items using the face-to-face approach. Two sets of questionnaires were utilized of which, there were slight variations in the items included to be administered to the pupils which revolved around two main objectives and that of the parents/guardians (teachers inclusive). The rationale for this slim disparity is to give ample space for the researchers to cover most relevant variables peculiar to both categories making up the sample size.

Administering the questionnaire

The researchers observed the following protocols before, during and after the field survey;

- i. Crafted questionnaires were subjected to review by field experts where appropriate recommendations were given on question formatting, wording and presentation.
- ii. Pre-testing of the questionnaire was conducted in Yawmatwa D/A Primary School which is a small town

close to Dansokrom, with a total of 25 participants who have same characteristics with the intended population under study. The imperative for the pre-testing exercise was to help highlight the problem areas, reduce measurement errors, ascertain whether or not participants would interpret the questions correctly, ensured that ordering of questions would not influence the way a respondents follow the items, check the validity and reliability of the instrument as well as aided in quantifying the time needed for the completion of the items.

- iii. All COVID-19 protocols were duly observed on the field especially, the observation of social distancing during the questionnaire administration. The safety of the pupils were ensured by sanitizing their hands before and after the exercise.
- iv. Permission to access the school premises and have its occupants as respondents, were sought by a written letter to the headmaster which eventually earned the researchers the greenlight to conduct the study. Also, self-introductions were given to the parents/guardians upon visiting their homes (hamlets) with brief exposition on the intended research so as to get their willingness and attention span throughout the exercise.
- v. The face-to-face questionnaire administering method was adopted rather than giving out the items to the participants to complete in the absence of the researchers. This was done in order to achieve a good response rate, check to ascertain the category of the respondent before asking the questions and also helped in explaining or interpreting questions in the local dialects (Sefwi and Twi) to the parents/guardians and pupils who had challenges understanding the English language.
- vi. A questionnaire was duly completed with one respondent before moving to the others. The entire field work lasted for 3 days (6th – 9th September, 2022).

Validity of the instrument

Field (2005) considered instrument validity as the ability of the survey items to gather data that comprehensively cover area of study and therefore requires the field instrument to be tested to verify if it would measure what it actually seeks to measure. For the study to attain instrument validity, specifically, content-related validity, the items on the questionnaires were crafted in simple expressions devoid of unfamiliar words that might have a negative bearing on the choices of respondents. The study again did a pilot test of the survey instrument with a total of 25 participants in Yawmatwa D/A primary school as the pupils share same characteristics with the intended respondents of the study. The items were also reviewed to ascertain their ability to elicit informed responses from participants which were interpreted according to the data gathered, operationalization of concepts and in consonance with the research objectives. The survey instrument was administered in-person (face-to-face) by the researcher to all the sampled respondents to help achieve a higher degree of both construct and content validity.

Instrument Reliability

Research instrument is said to be reliable if it exhibits the ability to be produced and to give a consistent result when utilized by different researchers under the same methodology, giving that, all variables remain constant (Robinson, 2009). To achieve reliability, the researcher did not interfere with the

responses given to the close-ended questions even though interpretation was given on the questions for easy understanding. The researcher sincerely ticked the options suggested by the individual respondents. Also, during the data analysis, the researcher only assigned numbers to the responses to be inputted into the IBM SPSS version 21 software for analysis without any personal biases or prior knowledge about the study area. A Cronbach's Alpha (α) score of 0.824 was obtained upon subjecting 13 scalable items on the survey instrument to an internal consistency test. The instrument deployed is therefore reliable, since an Alpha value of +0.82 depicts a good internal consistency (Streiner, 2003).

Research Population

A research population refers to the set of all units on which the research findings would be applied as it possesses certain characteristics under the study (Shukla, 2020). It is simply the total number of elements in the study area from among which a research sample is derived. The target population for the study is 189 comprising 128 pupils (65 lower primary and 63 upper primary), 4 teachers and 57 registered parents/guardians of Dansokrom D/A primary school's Parents and Teachers Association (PTA).

Research Sample Size

To effectively determine the sample size to use in order to make findings and generalization applicable to the entire population, scholars have recommended some minimum percentages researchers can use; key among them are, the 40% minimum proposed by Turkson (2013) and Saunder et al. (2007) if the population size involves a few hundred; a minimum of 20% if it is several hundred; a minimum 10% rate if population is a thousand and 5% minimum should it exceed thousand. Yamane (1967) proposed a mathematical formula which has been widely used by quantitative researchers. It requires the researcher to be certain of the total population of the study area and to decide on the confidence level and permissible margin of error. The formula is mathematically expressed as $n = \frac{N}{1 + N(e)^2}$ where 'n' is the expected sample size, 'N' is the total population and 'e' is the error margin. This research study selected a sample size of sixty-five (65) out of the total 189 target population using the Yamane's formula at a 90% confidence level and 0.10 permissible error margins. That is;

Sample size (n) = Population/1+ [Population (Error Margin) ^2]

$$n = \frac{N}{1 + N(e)^2}$$

$$(n) = 189/1 + [189(0.10)^2]$$

$$(n) = 189/1 + 189(0.01)$$

$$(n) = 189/1 + 1.89$$

$$(n) = 189/2.89 = 65.4$$

Therefore, sample size (n) = 65

Research sample distribution: The study collected primary data from a total of sixty-five (65) participants which is composed of forty (40) upper primary level pupils, all the four (4) teachers and twenty-one (21) parents/guardians. The researcher selected participants from only the pupils of the upper primary level (class/stage 4 to 6) due to the fact that their average age of 10.7 helps tone down the ethical requirements

to be met when interviewing or administering questionnaires to children. Again, they can respond to the survey items easily under minimal guidance relative to those at the lower level. Also, the study included all the 4 teachers of Dansokrom D/A primary school in the sample size because they teach across all the stages as shown in Table 1.

Table 1. Composition of the sample size

Category	Population	Male	Female	Sample	%age
Lower primary	65	28	37	0	0.0
Upper primary	63	43	20	40	61.5
Teachers	4	3	1	4	6.2
Parents/guardians	57	24	33	21	32.3
Total	189	98	91	65	100.0

Source: Researchers' own construct

Sampling Technique: The study adopted the multi-staged probability sampling technique to help select the sixty-five (65) participants by first utilizing the stratified non-proportional probability sampling technique which allowed elements in the target population to be categorised into two strata namely; the pupils' category and the parents/guardians' category. This was done to give enough space for both the pupils and their parents/guardians to be fairly represented. Secondly, the quota sampling method was utilized to allot preset quota of 61.5% and 38.5% to the pupils and the parents/guardians' categories respectively. The disparity in the percentages is because the pupils' contribution to the entire study population is relatively higher than the parents/guardians. Also, the pupils are considered to be the main subjects of study. To help select the representatives from the 63 upper primary pupils' category, a sub-quota of 17.5%, 45.0% and 37.5% were allotted to those in class four, class five and class six respectively. This was done relative to the 11, 28 and 24 total number of pupils duly registered in each class/stage respectively. Thirdly, the lottery method was deployed to select the final participants from each class. 'YES' was written on 40 pieces of papers and 'NO' written on countless pieces which were folded and casted on the table once for the pupils to pick from each class. The pupils who picked the 'YES' papers were included in the sample. The study adopted this method over others to minimize bias in selecting participants. All the 4 teachers available in the school were purposely included in the sample due to their limited number and also because they handle pupils across the classes under study. Finally, the purposive method was utilized in getting the 21 parents/guardians to participate.

Ethical Considerations

The study paid peculiar attention to the under listed ethical principles as prescribed by Bhandari (2021) before, during and after the field work.

- i. *Informed consent:* the researchers made it clear to participants without any prejudice that they are free to participate in the study and could also opt out any time within the process. The people were willing to respond to the survey items due to the prior permission sought from school authorities. Even though children may not be able to pledge their consent to a research study, the presence of their teachers and parents during the questionnaire administration helped to handle this effectively.
- ii. *Respect for confidentiality and anonymity:* most of the questions included in the survey were somewhat critical on

the distance to be covered by pupils and teachers to and from school which could trigger emotional memories and even bring to bear the socio-economic conditions of respondents. To this end, the researchers gave word of mouth assurance of the confidentiality of their responses and also pledged to keep them anonymous during the recording, numbering, coding and analysis of any information given.

- iii. *Objectivity in communicating results:* the field data collected was carefully coded and entered into the IBM SPSS version 21 computer software for quantitative analysis. The outcomes were presented in simple frequency tables and graphs and discussed accordingly without any interference from the researcher's personal interest or foreknowledge about the challenges facing Dansokrom Primary School.
- iv. *Protection for Child Rights:* the study needed direct information from the pupils about how they perceived the location of the school and its impacts on their academic activities. However, considering the ethics in having children as research participants, the researcher resultantly restricted participation to only pupils of stage/class 4 up to stage/class 6 who are considered to be of an average age range of 9-12. Also, the questionnaire was administered to the pupils by the researchers in the presence of their class teachers and parents/guardians (those we met at home).
- v. *Potential for harm:* considering the need to include the pupils in the research sample, questions were crafted in a way that would not harm them psychologically. Also, with the global issue of COVID-19 pandemic, the researcher ensured a considerable level of health and safety of participants by observing the necessary protocols and also encouraged participants to emulate. Alcohol-based hand sanitizer was applied intermittently before, during and after the questioning process.

RESULTS

This section presents a summary of the research findings. The study collected data from 65 respondents comprising 40 pupils and 25 parent/guardian. The researchers attained a 100% response rate due to the face-to-face questionnaire administration method utilized.

Demographic data of participants

The study considered the demographic distribution of the participants since their variations may have an influence on the response. Information on gender, age distribution, educational status as well as estimated distance of participants to the school site were sought and summarized in Table 2.

Table 2. presents a tabular summary of the demography of the participants. It portrays a good mix of gender as well as age category. The majority of the pupils sampled are males, and ranges between 10 and 11 years with a chunk of them in grade/class five as at the time of the study. The data reveals that a little over half (52.5%) of the pupils cover long distances to school predominantly by trekking rather than the use of bicycle. The Table 2 also portrays a slight majority of females in the parent/guardian category. The respondents in this category were predominantly ranging between the ages of 35-44 years with a shared majority of those who had completed basic school as well as secondary school education.

In terms of distance to the school site, majority (44%) of them concur with the pupils of covering a long distance to access the school facility.

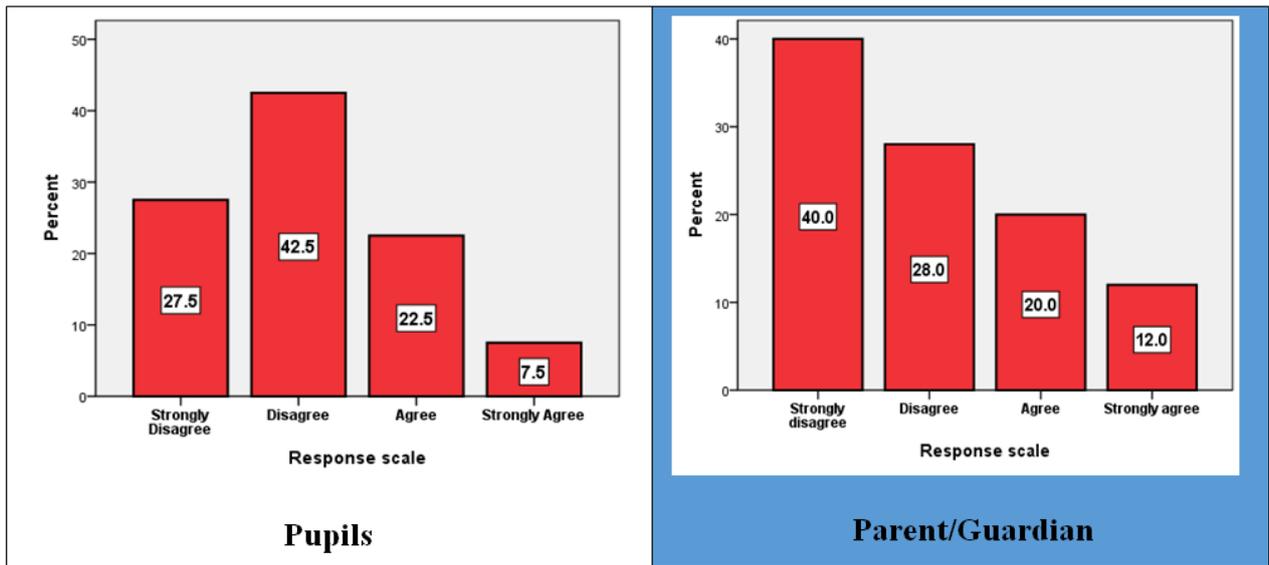
Table 2. Demography of participants

Pupils			Parent/Guardian		
Frequency		%	Frequency		%
Gender			Gender		
Male	24	60.0	Male	11	44.0
Female	16	40.0	Female	14	56.0
Age range			Age range		
9 years	6	15.0	Below 20	2	8.0
10 years	12	30.0	20-24 years	3	12.0
11 years	11	27.5	25-34 years	8	32.0
12 years	9	22.5	35-44 years	10	40.0
13 years	2	5.0	45-55 years	2	8.0
Current stage			Highest education		
Class Four	7	17.5	None	2	8.0
Class Five	18	45.0	None Formal	4	16.0
Class Six	5	12.5	Basic	6	24.0
Mode of transport			Secondary		
Bicycle	2	5.0	Diploma/HND	4	16.0
Walking/Trekking	38	95.0	1 st Degree	3	12.0
Distance to school			Distance to school		
0-0.99 km	3	7.5	0-0.99 km	3	12.0
1-2.49 km	9	22.5	1-2.49 km	5	20.0
2.5-4.99 km	21	52.5	2.5-4.99 km	11	44.0
4.5+ km	7	17.5	4.5+ km	6	24.0
TOTAL	40	100.0	TOTAL	25	100.0

Source: Field survey, 2022

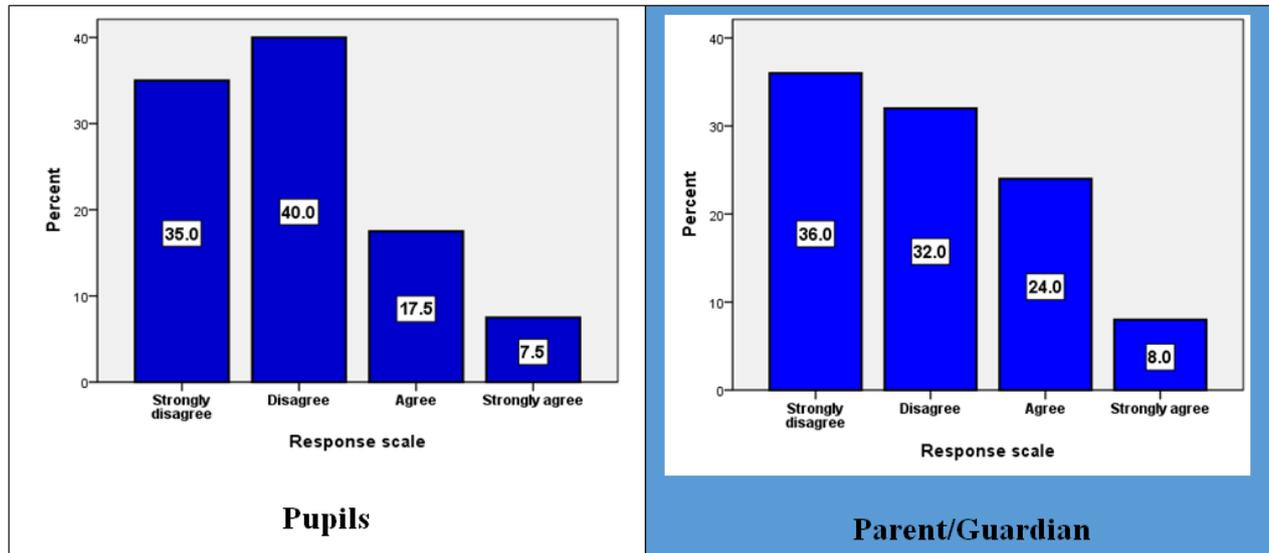
Effects of school location on pupils' participation in academic activities

The study sought to investigate the effects of school location on pupils' involvement in the academic activities of Dansokrom Primary School. The four-points Likert response scale was deployed for participants to rank their degree of agreement or disagreement on statements posed relative to the reviewed literature. The relative ease with which stakeholders access the school facility was interrogated. Figure 1 graphically illustrates the data to that effect. The data reveal that a combined 70 % majority of the pupils were reprobate on the idea that the location of the school grants them easy access to it whereas a combined 30 % approbate the assertion. Pertaining to the parent/guardian respondents, a combined 68 % majority disagree to the assertion whilst 32 % expressed their affirmation to the statement. The effect of the school location on pupils' reporting time to school during school days was investigated by the researchers. Figure 2 graphically summarizes the response from both the pupils and parent/guardian. The data reveal that a combined 75% and 68 % majority of the pupils and the parent/guardian respectively disagree with the assertion that the school location enables the pupils to report early. Inversely, a total of 25 % of the pupils as well 28 % of the parent/guardian respondents expressed their agreement with the statement. The study again sought to ascertain the effect of the school location on pupils' participation in classroom activities. Figure 3 graphically illustrates the data. The data reveal that a combined 80% and 72% majority of the pupils and the parent/guardian respectively disagree with the assertion that the school location enables the pupils to partake in classroom lesson activities. Inversely, a total of 20% of the pupils as well 28 % of the parent/guardian respondents were approbate on the assertion. The researchers further investigated the effect of the school location and its corresponding distance that pupils cover to the home after school sessions on private/personal studies of pupils at home. The data is illustrated by Figure 4.



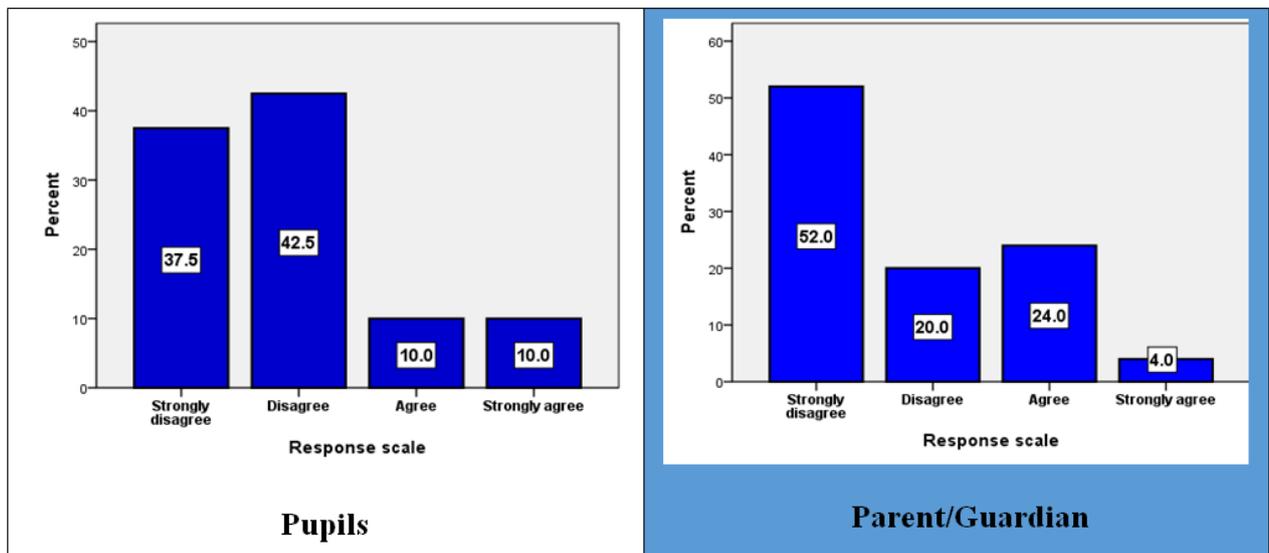
Source: Field survey, (2022).

Figure1. The location of the school makes it very easy to access it



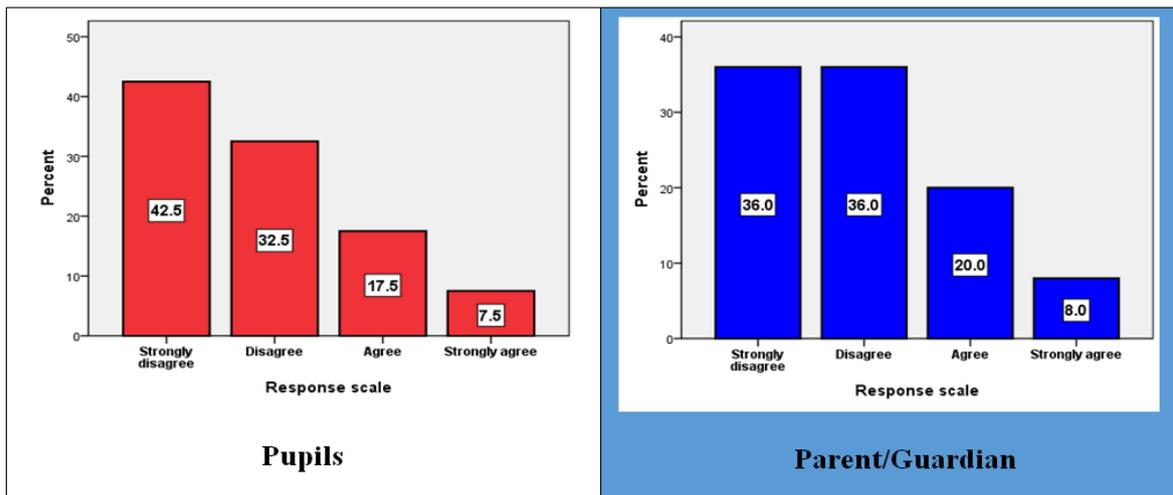
Source: Field survey, (2022).

Figure 2. The location of the school enables you/ward to report to school early



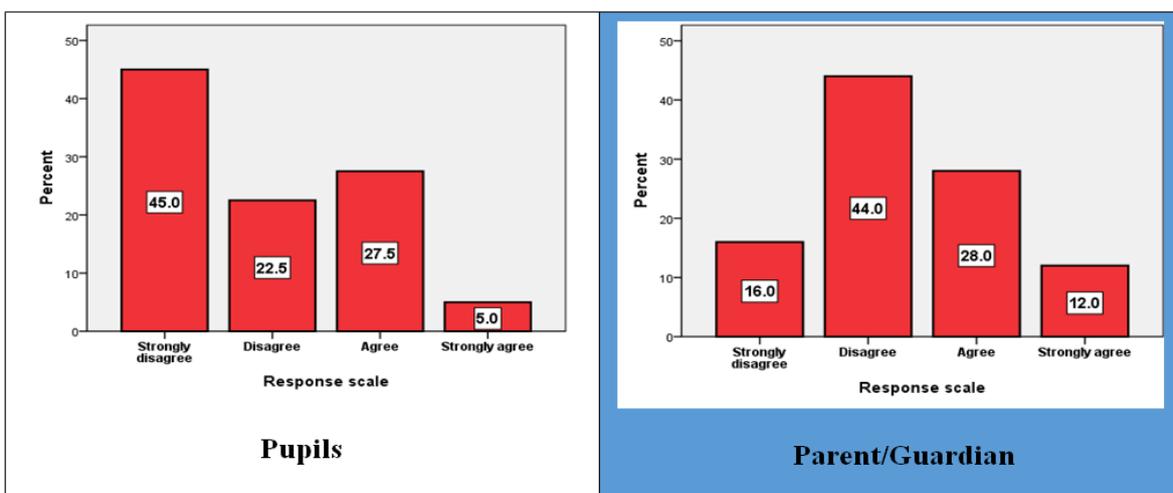
Source: Field survey, (2022).

Figure 3. The location of the school enables you/ward to partake in class lessons



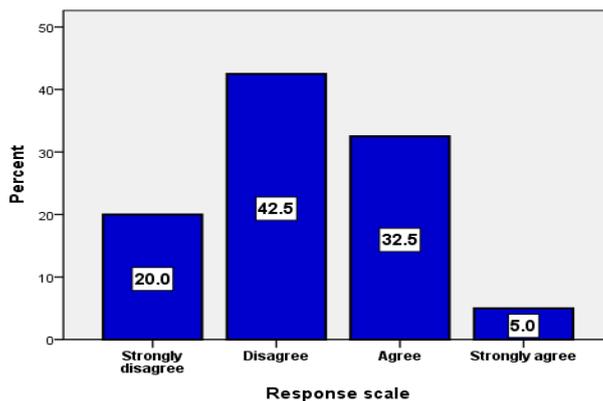
Source: Field survey, (2022).

Figure 4. The distance home after school promotes your/ward personal studies at home



Source: Field survey, (2022).

Figure 5. The location of the school enables you/ward to return home early to complete your take-home assignments



Source: Field survey, (2022).

Figure 6. The location of the school enables you to participate in school sporting/cultural/march pass activities

The data reveal that a combined 75% and 72 % majority of the pupils and the parent/guardian respectively were reprobate on the assertion that the pupils cover back home after school sessions that the distance that the pupils cover back home after school sessions promotes their personal studies at home. On the contrary, a total of 22% of the pupils as well 28 % of the parent/guardian respondents were approbate on the assertion. The study further investigated the effect of the school location and its corresponding distance that pupils cover to the home after school sessions on their take-home assignments.

The data is illustrated by Figure 5. The data reveal that a combined 67.5% and 60% majority of the pupils and the parent/guardian respectively disagree with the assertion that the location of the school enables the pupils to complete their take-home assignments. On the contrary, a combined 32.5% of the pupils as well 40% of the parent/guardian respondents expresstheir agreementwith the assertion. The researchers further interrogated the pupils to ascertain the effect of the school location and its corresponding distance that pupils cover to school on the pupils’ engagement in school

sports/cultural/march pass activities. The data is illustrated by Figure 6. The data reveal that a combined 62.5 % majority of the pupils disagree with the assertion that the location of the school enables the pupils to participate in school sporting/cultural/march pass activities. On the contrary, a combined 37 of the pupils express their agreement with the assertion.

DISCUSSION

This section of the paper presents a detailed discourse of the major research findings relative to the leading theoretical and empirical findings in the extant literature. The overriding objective of the study is to investigate the effects of school location on pupils' participation in the academic and extra curricular activities of Dansokrom Primary School in the Bia West district of the newly created Western North Region of Ghana. The study established that, the location of the school makes it very difficult for the pupils to access it as indicated by 70.0% of the participants. The difficulty in accessing the school was found to have a negative impact on the pupils, as it leads to habitual lateness to school as well as lateness to class sessions. The observations made by the pupils on the effects of school location, were largely confirmed by 68.0% of the parents/guardians who also indicated that, their wards find it very difficult to access the school. This according to them eventually makes their wards report to school late as well as not being able to partake in early class lessons. This findings resonate with that of Onderi et al. (2014) conclusion that, innocent pupils who cover long distances on foot, report to school late. This according to the authors makes the pupils get back home from school late and become exhausted, leading to poor concentration on school activities, encourage absenteeism as well as school drop-outs (Moyo, 2013; Taiwo, 2019). This finding is also in line with Waswa (2015) revelation that, students in Philippines who walk long distances from home to school are unable to complete their outside school activities like take-home assignments, reading tasks and personal studies, since they spend most of their quality time and energy trekking. Another salient effect of school location established is that, majority of the pupils of Dansokrom Primary School representing 70 % of the total sampled, are required to cover long distances on foot to and from school which leaves them exhaustive to engage in personal studies after school which is congruent with the findings of Galabawa et al. (2002), Moyo (2013) and Taiwo (2019). This phenomenon according to 72% of the parents/guardians, do not enable their wards to do house chores. It is pertinent to note that, school location was found to rather have a minimal impact on pupils' participation in school sporting/cultural/march pass activities and the completion of take-home assignments. This was affirmed by 37.5% and 32.5 % respectively. The emerging issue was that the sting of the location of Dansokrom primary school on pupils' participation in morning assembly and early class lessons were harder as compared to its mild impact on pupils' engagement in extra curricular activities like sports and 6th March Independence day student march pass. This findings further iterate the Self-Determination Theory (SDT) espoused by Deci and Ryan in their 'Theory of Motivation' workpiece (Ackerman, 2018). Most of the pupils are intrinsically motivated to participate in such school activities like sports, art and culture as well as independence day observation. The inner joy and fulfillment that the pupils stand to gain from such activities keep them motivated as argued by proponents of the SDT. Hinged on the tenets of the SDT, this current finding somewhat diverges from

the findings of Waswa (2015) as well as Matingwina (2018) that, students who walk long distances to and from school are unable to engage in extracurricular. However, the school's location was largely found to have a negative influence on the pupils' engagement in core academic activities which strongly confirms the work of Baliyan and Khama (2020) in Botswana.

Conclusion and recommendations

The location of Dansokrom primary school which is considered relatively far away from most of the stakeholders has negative effects on the academic activities of the pupils. This mostly manifests in their rampant lateness to school, inability to participate in morning assembly sessions as well as early morning lessons. A section of the pupils has nonetheless, defied the sting of long distance to and from school to still get themselves involved in extra curricular activities of the school as a way of intrinsic motivation. In the build up to establishing educational facilities, particularly, those targeting residents of remote communities, the authorities involved such as the traditional rulers who most often than not, serve as the custodians of lands for national development; the contracting firm together with its consultants; the representatives of the administrative district as well as the ministry of education ought to do due diligence by locating the facility in close proximity to the intended users. The study thereby recommends that the Ministry of Education through the Bia West district education secretariat should device sustainable means of assisting the pupils of the farmyards and cottages in an around Dansokrom who frequent the Basic school, to have a safe and relatively faster mode of getting to school. The local authorities and the Assembly should also join hands to provide motorable roads to the adjoining farming communities of Dansokrom to allow for the use of readily available means of transport such as tricycles, motor cycles and bicycles to convey the pupils to and from school.

Limitations of the study

- i. A study of this nature should have been wider in scope to include the entire pupils and their respective parents/guardians. However, the limited nature of resources such as time, human capital and financial strength of the researchers could only make room for the sample size chosen, hence, making it relatively inappropriate to generalize to results.
- ii. The study had pupils of class 4-6 with an average age of 10.7 years as its core participants which thereby requires the presence of their class teachers during the questionnaire administration process. However, getting the maximum attention of the teachers was somewhat not forthcoming which eventually extended the time on the field.
- iii. Lastly, the researchers faced a slight challenge of locating most of the parents/guardians in their villages as well as getting most of them to understand the survey items in their local dialects.

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