

Relationship between Leadership Practices of Headteachers and Learners' Academic Achievement in the Public Basic Schools in Asokwa Municipality

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Abstract

The purpose of the study was to examine the leadership practices of headteachers and their relationship with learners' academic achievement in the Asokwa Municipality. The study was grounded in the positivist paradigm linked to the quantitative research approach. Specifically, the study employed a descriptive survey design. The sample for the study was 311, comprising 22 headteachers and 289 teachers. Guided by a census frame, all the headteachers were involved in the study, while a proportionate stratified random sampling technique was employed to sample the teachers. A structured questionnaire was used to collect quantitative data, analysed with the aid of the Statistical Package for Service Solution (SPSS) version 28. The data were analysed using descriptive statistics, including mean, standard deviation, and frequencies as well as inferential statistics such as Pearson Product Moment correlation. The study established that the headteachers highly practised all the leadership in the Path-goal leadership theory (supportive directive, participative, and achievement-oriented leadership). However, the findings suggested that the headteachers practised supportive leadership mostly, followed by directive leadership, and participative leadership, while achievement-oriented leadership was least practised among the headteachers. Therefore, the study recommended that the Asokwa Municipal Education Directorate of the Ghana Education Service should organise in-service training programmes on the effective application of the Path-Goal leadership theory for the headteachers to enable them to enhance the academic achievement of the learners.

KEYWORDS: Leadership; Leadership practices; Academic achievement; Public Basic Schools; Teachers' performance

1.0 INTRODUCTION

The role of leadership in organizational effectiveness is well documented in the literature. This assertion is affirmed by Jaskaran and Sri-Guru (2014) when they observed that leadership contributes significantly to the success and failure of an organization. Likewise, Luthan (2002) indicated that the difference between success and failure, whether in war, business, a protest movement or basketball is attributed to leadership. Accordingly, effective leadership in educational institutions is recognised as a factor that makes a difference between achievers and non-achievers. However, a leader influences the achievement of the goals of an organization through his/her leadership behaviours exhibited.

Studies have shown that leadership practices are linked to the achievement of subordinates and organizations in general. In their view, Shahab and Nisa (2014) argue that leadership behaviour has a positive influence towards employee achievement, and eventually enhances organizational achievement. Tarabishy, Solomon, Fernald and Sashkin (2005) corroborate this view that leaders and their leadership behaviours constitute significant influence on the subordinates and organizational outcomes. Thus, it is expected that leaders in all organizations, including educational institutions, practice appropriate leadership behaviours to attain organizational goals.

Other researchers have also confirmed the effect of leadership on achievement. For instance, Phillips and Gully (2012) suggested that at its best, leadership inspires and motivates employees to work hard towards organizational objectives and helps the organization to succeed. These authors further indicated that high achievement comes about as a result of appropriate behaviour, especially discretionary behaviour and the effective use of required knowledge, skills and competencies which is influenced among other things by leadership practices. Thus, employees choose to perform the tasks as a result of their identification with the leader. From the position of Phillips and Gully (2012), it could be seen that even though employees are aware of and discharge their responsibilities, leadership kindles and sustains enthusiasm and commitment to perform tasks voluntarily to ensure the realization of goals.

Although scholars have touted leadership behaviours as drivers of the school's success, other practitioners have recounted the effects of inappropriate leadership behaviours. Northouse (2019) recounts the costs of unsuitable leadership behaviours such as poor employee achievement and attrition in contemporary organizations. The literature further indicates that employees leave leaders and not organizations (Beardwell & Claydon, 2007), which implies that appropriate leadership behaviours could help in employee retention. Thus, ineffective leadership behaviour is an affront to the school's success. As a result, school leaders ought to identify and nurture leadership behaviours that have the potency to accomplish school aims.

Therefore, leaders in educational institutions are expected to identify and apply effective leadership behaviours to obtain educational goals. In supporting this claim, Crum and Sherman (2008) posit that school heads are required to provide insights into their leadership behaviours that foster an environment which is supportive of high teachers' achievement. It is deduced from the

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<https://doi.org/10.5281/zenodo.13958256>

preceding position that educational leaders need to review their leadership behaviours and direct them towards the achievement of the teachers. Adeyemi (2010) also strengthens the argument that leadership behaviour occupies an important position in school administration as school leaders control school resources to influence the positive achievement of educational goals.

Apart from leadership practices, the academic achievement of students has far-reaching repercussions for students as well as nations. The social and economic development of the country is directly linked to student academic achievement. School reforms around the world have placed student achievement at their core (Mora-Ruano, Schurig, & Wittmann, 2021). Ali, Jusoff, Ali, Mokhtar and Salamt (2009) posit that students' academic achievement plays a crucial role in producing the best quality graduates as future leaders and manpower for a country's economic and social development. Thus, students of good academic standing are perceived to have demonstrated a grasp of relevant concepts, knowledge, skills, and attitudes to take leadership positions and man the various sectors of the economy. Conversely, the poor academic achievement of students is evidence of a lack of necessary capacities for socio-economic progress and personal fulfilment.

Many countries are convinced that students form the core of the educational process and that without good academic achievement, all innovations in education would be a failure (Achombo, 2010). In Ghana, students' academic achievement is a vital determinant for selection and placement into higher education and programmes. With the Computerized School Selection and Placement System (CSSPS), which is a competitive selection into basic schools and programmes based on learners' academic achievement in the Basic Education Certificate Examination (BECE), academic achievement has become a concern for all stakeholders. The concern among stakeholders for students' scholastic achievement has made researchers give considerable attention to studies focusing on factors that predict students' academic achievement in past decades. Based on empirical evidence through extensive studies, scholars have documented numerous factors that either bolster or throttle the academic achievement of students. In a review of 800 meta-analyses, Hattie (2009) discovered 138 variables that significantly affect academic achievement. This author identified socio-economic status (SES), parental involvement and home environment as three major context variables that influence academic achievement. Drawing from this finding, it is instructive that stakeholders enhance these conditions for better academic attainment else they (factors) stifle achievement.

Research has established a relationship between leadership and student academic achievement. Education Improvement Research Centre (2022) established that school leadership has a significant impact on fostering student achievement. The impact of leadership is greatest where it is focused on improving teaching and learning and is amplified when responsibilities for leading teaching and learning are widely distributed across the school. Research indicates that the leadership practices of school leaders are pivotal in ensuring effective schools (Onoye, 2022). According to Wu, Gao and Shen (2020), studies conducted over the past 10 years have shown that leadership influences learners' academic achievement. Consequently, school leaders are expected to develop and practice leadership that leads to increased or enhanced student achievement (Glanz & Zepeda, 2016).

The relationship between leadership behaviour and student achievement has been a contentious issue. Blase and Blase (2000) contend that the relationship between principals' leadership practices and student academic achievement has been debated by scholars and researchers. This situation creates room for further research to be conducted to throw more light on the relationship between leadership practices and academic achievement in specific settings. It is against this backdrop that this study investigates the relationship between headteachers' leadership practices and the academic achievement of students in public Junior High Schools (JHSs) in the Asokwa Municipality.

Due to the necessity of academic achievement in the education success of leaders, education stakeholders in the Asokwa Municipality expect that learners in public basic schools record high academic achievement. However, the academic achievement of learners in the Basic Education Certificate Examination (BECE) in the Asokwa Municipality has not been encouraging in recent times. The achievement of learners in the BECE from 2018 to 2021 is presented in Figure 1.

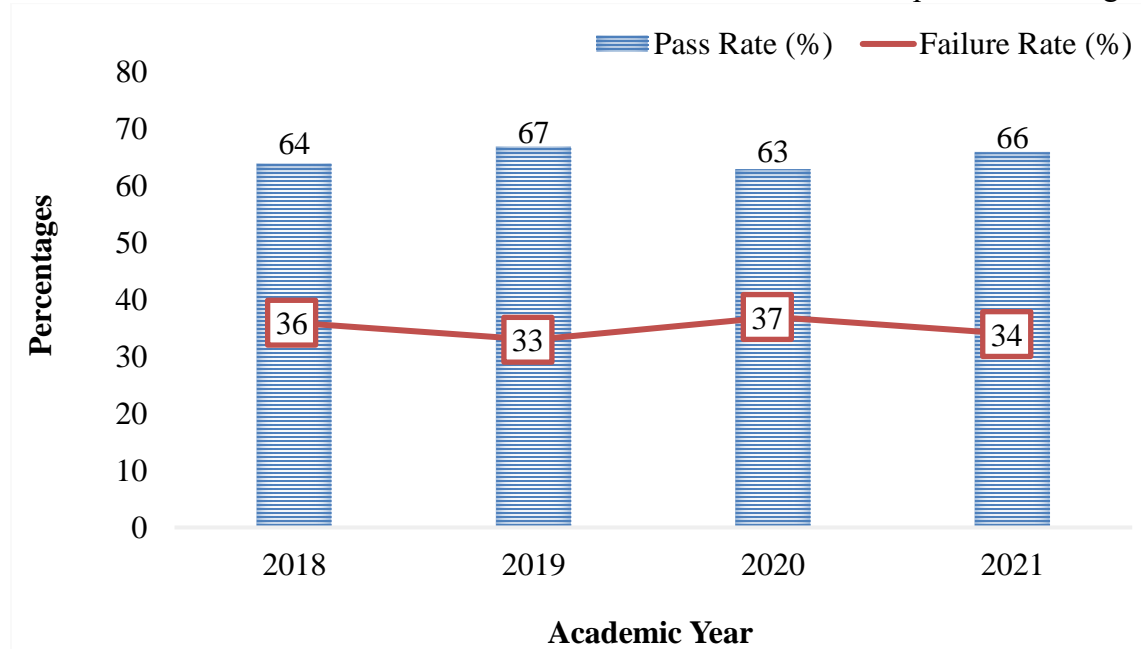


Figure 1: BECE Achievement in Asokwa Municipality (2018-2021)

Source: Asokwa Municipality Education Directorate, 2022

The results in Figure 1 indicate that the average pass rate of the learners in the municipality was 65%, while the remaining 35% of the learners failed the examination. The statistics reveal that the trend in the achievement of the learners has not been consistent over the period. For instance, the achievement of the learners in the examination improved in 2019 with a 67% pass rate over the 2018 achievement of a 64% pass rate. In 2020, achievement dropped over the previous year with a 63% pass rate. Thereafter, the achievement increased and 66% of the learners passed the

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<https://doi.org/10.5281/zenodo.13958256>

examination. With this trend, it is predictable that the achievement of the learners in the 2022 BECE will drop if attempts are not made to reverse the trend.

The achievement of the learners in the BECE has consequences for learners and education stakeholders in the district. Firstly, some of the learners were unable to get admission to highly endowed secondary schools in the country because their grades could not make them compete with other learners in the Computerised School Selection and Placement System (Ghana/otecfmghana.com/, 2019). Secondly, the low achievement of learners in the examination leads to school dropout and absenteeism among the learners (Ghana News Agency, 2018). Thirdly, the low achievement of the learners in the BECE brings great worry and anxiety among headteachers, teachers, and parents (Ghana News Agency, 2018).

To address the incidence of low academic achievement among the learners, the Municipality implemented measures with the hope that achievement would improve. For instance, the Asokwa Municipal Assembly sponsored mock examinations for BECE candidates (Graphic Online, 2019). Secondly, the provision of learning resources was also carried out with the hope that the academic achievement of the learners would improve. Again, education stakeholders in the municipality held a public forum on the low achievement of learners and measures that could be put in place to enhance the achievement of the learners (Ghana/otecfmghana.com/, 2019).

Despite the institution and implementation of these measures, the low achievement of the learners persists in the Municipality. Therefore, it is pertinent to consider other measures that could help in augmenting the academic achievement of the learners. Meanwhile, studies have established that the leadership practices of the headteachers are linked to the academic achievement of learners (Education Improvement Research Centre, 2022; Onoye, 2022; Wu et al., 2020). Consistent with these findings, the low achievement of the learners in the Asokwa Municipality could be attributable to the leadership practices of the headteachers, but there is no empirical evidence to support this claim. Therefore, this study was carried out to gather empirical proof to either support or refute the hypothesis that the leadership practices of the school headteachers are related to the learners' academic achievement in the Asokwa Municipality of Ghana. The purpose of the study was to examine the leadership practices of their headteachers and their relationship with learners' academic achievement in public JHSs. To achieve this purpose, the study looked at the leadership practices of the headteachers as well as the relationship between the headteachers' leadership practices and learners' academic achievement in the schools.

The study was guided by the following research questions:

1. What are the leadership practices of headteachers in public basic schools in the Asokwa Municipality?
2. What is the relationship between headteachers' leadership practices and academic achievement of learners in public basic schools in Asokwa Municipality?

This study is significant in several ways. Firstly, it is hoped that the findings of the study will help draw the attention of the headteachers to their leadership practices and how they relate with the academic achievement of the learners. With this knowledge, headteachers will be able to intensify

the practice of certain leadership if it is discovered that they (leadership practices) are linked positively to the learners' academic achievement. Conversely, they will alter the leadership practices that do not relate to the learners' academic achievement. Secondly, it is hoped that the findings of the study will guide the Asokwa Education Directorate of the Ghana Education Service to know the leadership practices of the headteachers so that measures can be put in place to improve the leadership practices of the headteachers.

1.1 Theoretical Review

The Path-Goal theory postulated by House and Mitchell (1974) underpinned the study. It is a situational approach to leadership because different situations call for different leader behaviour. According to these theorists, path-goal behaviours can be exercised by leaders in any combination with various subordinates and within different organizational environments and situations. The theory is called Path-Goal because its major concern is how the leader influences the followers' perception of their work goals, personal goals, and the paths to goal attainment. Other scholars like Vecchio, Justin, and Pearce (2008) throw more light on the Path-goal theory when they posit that the most effective means of leadership is the leader specifying a goal for the organization, clearing the path or detecting and removing obstacles to the successful completion of that goal, then allowing followers to find the most effective route to the specified goal.

One of the propositions of the theory is that leader behaviour is acceptable and satisfying to the subordinates to the extent that the subordinates see such behaviour as either an immediate source of satisfaction or as instrumental to future satisfaction. The second proposition is that the leader's behaviour will be motivational to the extent that such behaviour gives satisfaction to subordinates' needs contingent on effective performance, and such behaviour complements the environment of subordinates by providing guidance, support and rewards necessary for effective performance. House and Mitchell (1974) identified four path-goal leadership behaviours: directive, supportive, participative, and achievement-oriented.

1.1.1 Directive Leadership

The directive leader clarifies expectations and gives specific guidance to accomplish the desired expectations based on performance standards and organizational rules (House & Mitchell, 1974). In this leadership, leaders solely determine policies and make plans, and tell subordinates what to do and how to do it. Besides, power is centralised to the leader, and employees under the leader have little freedom, and the leader shows greater concern for work than for his or her subordinates. Hartati, Fauzi and Zohriah (2024) explain that directive leadership wields unilateral authority and decision-making and followers are required to take directives from the leader. In line with this description, Lunenburg and Ornstein (2000) pointed out that directive leadership behaviour is authoritative and not to permit participation in decision making. The headteacher who uses this type of leadership behaviour provides teachers with specific guidelines, rules and regulations with regard to planning, organizing and performing activities in the schools.

This leadership behaviour has merits and drawbacks. It is deemed appropriate when the subordinates' ability is low and or the task to be performed is complex or ambiguous. Besides, job satisfaction is improved when the leader gives more directives (Hoy & Miskel, 2001). Negron (2008) opines that directive behaviour is appropriate with newly engaged or inexperienced subordinates and in situations that require immediate action. In schools, the headteacher could practice directive leadership behaviour for newly recruited teachers who might not be experienced in their tasks.

However, House and Mitchell (1974) argued that directive behaviour may be perceived as aggressive, controlling, descriptive, and structured by dictating what needs to be done and how to do it, and it was found to relate negatively with the satisfaction of subordinates. From the above comments, it could be said that the directive behaviour obstructs the creativity of the subordinates as they are required to follow the dictates of the leader. The conclusion drawn from the discussion is that this leadership needs to be examined and applied in relation to the situation.

1.1.2 Supportive Leadership

Supportive leaders demonstrate respect for subordinates, treat everyone equally, and are concerned for subordinates' well-being (House & Mitchell, 1974). Hoy and Miskel (2001) describe supportive leadership behaviour as more of a relationship-oriented behaviour. According to these scholars, this leadership behaviour involves the leader being sociable and friendly, exhibiting concern for the welfare and personal needs of the subordinates and building an emotionally supportive environment. This behaviour of leadership portrays a cordial relationship between the leader and the subordinates working together to attain goals. With this leadership behaviour, the headteacher is seen as approachable, and ensures that the welfare needs of teachers and learners are provided or met.

The supportive is suitable when subordinates show a lack of confidence in their ability to complete a task and little motivation (Negron, 2008). Therefore, supportive behaviour helps to motivate the subordinates to perform as expected. Supporting the earlier view, Hoy and Miskel (2001) observe that this behaviour is effective when subordinates lack self-confidence, work on stressful tasks and when work does not provide job satisfaction. Headteachers need to apply this leadership behaviour when teachers and learners feel exhausted in their engagement and discharge of their tasks or when they lack the confidence to perform. This tends to improve the achievement of learners if sustained.

1.1.3 Achievement-Oriented Leadership

In the description of House and Mitchell (1974), the achievement-oriented leader:

sets challenging goals, expects subordinates to perform at their highest level, continuously seeks performance improvement and shows a high degree of confidence that the subordinates will assume responsibility, put forth effort and accomplish challenging goals (p.83).

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<https://doi.org/10.5281/zenodo.13958256>

From the above description, the task-oriented leader is concerned with the accomplishment of goals to the neglect of subordinates' welfare. The leader, therefore, sets high achievement targets, and subordinates exhibit high performance towards the targets, and attain them.

Lussier and Achua (2001) summarise the characteristics of achievement-oriented leadership, arguing that the leader sets challenging, but achievable goals for the subordinates; drives work for improvement; sets high expectations for subordinates; and rewards them when the expectations are met. Other scholars add that achievement-oriented leaders offer challenging tasks to followers to persuade them to accomplish the challenging tasks efficiently and effectively (Rahmawati et al., 2023).

The achievement-oriented leadership is appropriate when subordinates have an achievement-oriented mentality (Lussier & Achua, 2001). This implies that there are subordinates who desire to achieve results, and this leadership behaviour is consistent with their disposition. Contrarily, this leadership behaviour does not motivate subordinates who might not possess an achievement posture, and, therefore, are not encouraged to perform. However, Negron (2008) noted that achievement-oriented behaviour is suited for subordinates whose morale and confidence need to be enhanced to accomplish a given goal. In applying this to the current study, non-performing students could be motivated to perform as expected to get rewards. Stogdill (1999) contends that these behaviours are not mutually exclusive; that in fact, a leader can adopt them at different times and in different situations. As to which of the leadership behaviours is best from the point of view of maximizing follower job performance, it depends on the situation.

1.1.4 Participative Leadership Behaviour

According to House and Mitchell (1974), the participative leadership style assumes consultative behaviours such as soliciting suggestions from subordinates for suggestions prior to making a decision, although the leader retains final decision authority. The participative leader shares responsibilities with subordinates by involving them in the planning, decision-making, and execution phases (Negron, 2008). Workers who are motivated become self-directed and generate a creative team thereby presenting a greater cohesive team and ownership among participants (Hersey, Blanchard, & Johnson, 1996). Thus, participative leadership behaviour is collaborative in nature where both the leader and the subordinates are engaged in shared decision-making. The leader who employs this behaviour consults with subordinates for ideas and takes their ideas seriously when making decisions. However, the leader is responsible for the outcomes of the decisions. The participative leadership builds affable collaboration and allegiance and keen participation of the followers (Hartati et al., 2024). Students, like, teachers, could possess some relevant ideas about how they want to learn and, therefore, headteachers could engage them to elicit these ideas in the planning of teaching and learning. The learners will feel more satisfied if they have a say in what and how they want to learn and these could improve their academic achievement in the long run.

1.2 Meaning of Academic Achievement

Several authors have explained the concept of academic achievement of students. According to Nuthana and Yenagi (2009), academic achievement represents the amount of knowledge and skills developed by a student in various courses. They further explained that the level of academic achievement is measured by tests, assignments and final examination results and is dependent on the standards put in place by the educational institution. It could be said that academic achievement is the totality of knowledge and competencies a student has attained in the prescribed subject areas. Academic achievement is not subject-specific, but rather the aggregate achievement in all courses. This explanation of academic achievement relates to the basic education system in Ghana where Junior High School Students are graded in aggregate scores in the compulsory subjects (English, Mathematics, Integrated Science, Social Studies) and any other two subjects. Besides, teachers conduct tests and give assignments to assess the level of academic achievement of students.

Otoo (2007) advances that academic achievement constitutes what a student is capable of achieving when he or she is tested on what has been taught. His delineation of academic achievement is similar to that of Nuthana and Yenagi (2009) in that academic achievement is evaluated through tests. Therefore, it is construed that the above educationists consider tests as critical processes through which students are judged to have acquired knowledge and skills as outlined in the curriculum. This perspective is upheld by Velasco (2007) that many available definitions of academic achievement rely on quantitative data and calculations like that of test scores and grades. However, Otoo (2007) has pointed out that teaching determines the academic achievement of students, and it precedes testing. This study derives two conclusions from the viewpoint of Otoo (2007). Firstly, students are tested on what has been taught which makes academic achievement an outcome of the experiences of students in the classroom encounter. This observation presumes that students should not be tested on what they have not been taught. Secondly, the role of the teacher is vital in determining the academic achievement of students through teaching. Therefore, effective teaching results in good achievement, and poor teaching leads to dismal achievement.

1.3 Leadership Styles of Heads of Educational Institutions

Studies have been carried out to examine the leadership styles of school heads in several jurisdictions. For instance, Umara and Hota (2024) investigated the influence of supportive and achievement-oriented leadership styles of heads of departments on the teaching and learning of lecturers in higher education institutions in Borno State in Nigeria. The researchers adopted the Path-goal Leadership Theory in the study. The participants of the study were selected from 5 higher education institutions through the application of the simple random sampling technique. Questionnaire was used to collect data on supportive and achievement-oriented leadership styles. The data was analysed using descriptive statistics such as mean and standard deviation. The study revealed that even though the leaders practised a combination of leadership styles within the Path-goal leadership framework, the heads of department practised the achievement-oriented leadership style more ($M=14.99$, $SD=2.69$) than the supportive leadership style ($M=14.98$, $SD=2.48$).

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<https://doi.org/10.5281/zenodo.13958256>

Another study was conducted by Njuu, Njihia and Mwal'wa (2023) in Dodoma Urban District Council, Tanzania with the aim to examine the influence of leadership styles among headteachers on the academic performance of students. The study was underpinned by the Path-goal Leadership Theory, involving supportive and participative leadership styles. The researchers employed the concurrent mixed methods design within the mixed methods approach. The target population was 117 participants including 7 headteachers and 110 teachers. The participants for the study were selected through proportionate random and purposive sampling techniques. Closed-ended and open-ended questionnaires were used to collect data for the study where the quantitative data was analysed through descriptive statistics like frequencies and percentages while the qualitative data was analysed qualitatively. The study revealed that the headteachers practised both the supportive and participative leadership styles.

In the Philippines, Pacia and Guevarra (2023) analysed the leadership styles in 13 public secondary schools in San Pablo City. The study was guided by the Path-goal Leadership Theory involving the participative, supportive, directive and achievement-oriented leadership styles. The descriptive-correlational research design within the quantitative approach was adopted in the study. The researchers applied the purposive sampling technique to select 579 participants for the study. Mean and standard deviation were used to analyse the data. The study established that all the leadership styles within the Path-goal Leadership Theory were practised in the schools. However, directive leadership style was dominant ($M=6.20$, $SD=0.74$), followed by achievement-oriented leadership style ($M=6.13$, $SD=0.78$) and supportive ($M=6.09$, $SD=0.81$) and participative ($M=6.09$, $SD=0.84$) leadership styles respectively. Based on these findings and the findings of previous studies, it is evident that leadership styles within the Path-goal Leadership Theory are common among leaders in educational institutions.

1.4 Relationship between Leadership Practices and Academic Achievement

Researchers have explored the relationship between leadership practices and academic achievement. Studies on leadership have identified a positive relationship between leadership practices and academic achievement at various levels (Shafie, Baghersalimi, & Barghi, 2013). Obicci (2015) also discovered leadership has a positive link with individual academic achievement. In a survey by Paracha, Qamar, Mirza, Hassan and Waqus (2012), it was confirmed that a significant positive association between leadership practices and academic achievement. The findings of these studies suggested that leadership practices were vital in determining the academic achievement of learners, and the practice of some leadership enhanced the academic achievement of the learners than other leadership practices. Therefore, it is important that leaders analyse their leadership practices if they desire to increase the academic achievement of learners in schools.

Contrary to the previous findings, Akerele (2007) found no significant relationship between headteachers' leadership practices and academic achievement in secondary schools in Nigeria. Particularly, Akerele (2007) discovered that there was no significant relationship between directive leadership practice and academic achievement. However, Akerele (2007) found that learners performed better in schools having headteachers practising participative leadership than in schools

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having headteachers using directive leadership. Ijaiya (2000) confirmed this finding where a significant relationship between participative leadership and learners' academic achievement was found which implied that principals who practised participative leadership enhanced the academic achievement among the learners.

The results from the studies indicate that there is no agreement among scholars on the relationship between leadership practices and learner academic achievement. While some researchers discovered a positive relationship between these variables, others found no link between them. Again, the findings showed that some leadership practices influenced the academic achievement of learners more than others. In the midst of these disagreements, further research into the relationship between leadership practices and academic achievement is needed.

2.0 METHODS

2.1 Research Paradigm and Approach

The study was aligned with the positivist paradigm linked to the quantitative approach and employed the descriptive survey design. This research design seeks to represent accurately the characteristics of a particular individual, situation or group (Kothari, 2004). In this study, respondents were required to rate the leadership practices or behaviours of headteachers and their relationship with the academic achievement of learners which made the descriptive survey appropriate for the study.

2.2 Participants

The target population was 622, comprising 22 headteachers and 600 teachers. A sample for the study was 311 made up of 22 headteachers and 289 teachers. The sample represented 50% of the target population, which is consistent with Gall, Gall and Borg (2007) suggestion that at least 30% of the target population is representative in quantitative studies. Even though 311 participants were selected for the study, the findings of the study were based on responses from 301 participants, thus representing a response rate of 97%. The study employed census and proportionate stratified random sampling techniques to select the headteachers and teachers respectively. The involvement of participants through census requires collecting information from each and every person of interest which helps to eliminate sampling error and enhance the representativeness of the sample than any probability sampling techniques (Babbie, 2010). Therefore, all 22 headteachers in the target population were included in the study.

The proportionate stratified random sampling technique requires that the target population is divided into mutually exclusive sub-groups (strata), and, thereafter, random samples are then selected from each stratum to constitute the sample so that each stratum is fairly represented in the sample (Cohen, Manion & Morrison 2018). The teacher population was grouped by gender (male and female), and the proportion of each sub-group was calculated. For example, the male teachers

constituted 52% of the target population while the female teachers represented 48%. Using these proportions, 150 male teachers and 139 female teachers were selected for the study. The simple random sampling technique using the table of random numbers was used to select the individual teachers in each category separately.

2.3 Research Instrument

A structured questionnaire was used to collect data, and this required the participants to respond to a series of pre-developed questionnaire items which are closed-ended such that all participants respond to the same items in the same order (Polit & Beck, 2018). The questionnaire was made up of two parts. The first part contained items on the Path-goal Leadership Theory where the items were adapted by modifying them (the items) to represent the Ghanaian basic school context. The leadership questionnaire was made up of 20 items in a 7-point Likert scale with 5 items each for directive, supportive, participative, and achievement-oriented leadership such that 1 represents ‘Never’, 2 represents ‘Hardly Ever’, 3 represents ‘Seldom’, 4 represents ‘Occasionally’, 5 represents ‘Often’, 6 represents ‘Usually’, and 7 represents ‘Always’. The second part of the questionnaire collected data on the academic achievement of the learners. The scores of the learners in the end-of-year examination in 2022 in Mathematics, English Language, Integrated Science, and Social Studies were recorded. Therefore, secondary data on learners’ academic achievement was considered in this study.

The questionnaire was pre-tested among headteachers and teachers in Oforikrom Municipality, which was considered to have similar characteristics to the study area. The pre-testing exercise involved 31 participants, which constituted 10% of the sample size as recommended by researchers like Gall et al. (2007). The purpose of the pre-test was to ensure the validity and reliability of the questionnaire. Face and content validity of the questionnaire were established by students and lecturers, and experts in educational leadership and management respectively. Test-retest approach to reliability was adopted where the questionnaire was administered to participants in the pre-test and re-administered to the same participants after a time span of two weeks to generate two data sets. The reliability of the questionnaire was determined by a correlation coefficient greater than 0.80 as suggested by researchers (Jones & Rattray (2010). The Pearson Product Moment correlation was used to ascertain the reliability of the questionnaire as presented in Table 1.

Table 1: Reliability Test Results

Variables	Pearson correlation coefficient (r)
Supportive leadership	0.87
Participative leadership	0.89
Directive leadership	0.82
Achievement-oriented leadership	0.88
Overall Leadership	0.83

2.4 Data Analysis

The data was analysed through descriptive statistics including mean and standard deviation as well as inferential statistics involving the Pearson Product Moment correlation. The mean and standard deviation were used to determine the leadership practices of the headteachers, while the Pearson correlation was employed to determine the linear relationship between leadership practices or behaviours and learners' academic achievement. The interpretation of the strength of the relationship was based on Kothari's (2004) recommendation that if the correlation coefficient is greater than 0.3 but less than 0.5, then the relationship is moderate; the relationship is weak if the correlation coefficient is less than 0.3; and the relationship is strong if the correlation coefficient is 0.5 or greater.

3.0 RESULTS

3.1 Leadership Practice(S) of Headteachers in the Public Basic Schools

The first objective sought to examine the leadership practices of the headteachers. Northouse (2019) provided guidelines for the interpretation of the various leadership practices. He stated that for directive leadership, a common score is 23, scores above 28 are considered high, and scores below 18 are considered low, whilst, for supportive behaviour, a common score is 28, scores above 33 are considered high, and scores below 23 are considered low. Concerning participative behaviour, a common score is 21, scores above 26 are considered high, and scores below 16 are considered low. For achievement-oriented behaviour, a common score is 19, scores above 24 are considered high, and scores below 14 are considered low. The results for the practice of various leadership are shown in Table 2.

Table 2: Leadership Practices of Headteachers

Leadership	Minimum	Maximum	Mean	Std. Deviation	Interpretation
Supportive leadership	6.00	35.00	35	1.513	High
Directive leadership	15.00	35.00	29	1.564	High
Participative leadership	6.00	32.00	27	1.820	High
Achievement-oriented leadership	9.00	33.00	25	1.185	High

Source: Fieldwork Data, 2023

The data in Table 2 revealed that the score for supportive leadership (M=35, SD=1.513) fell within the high threshold. Similarly, the score for the directive leadership (M=29, SD=1.564) was high. For the participative leadership, the score (M=27, SD=1.820) was located within the high category, and likewise, the score for the achievement-oriented leadership (M=25, SD=1.185) was also high. These results implied that the headteachers practised all the leadership behaviours in the Path-goal leadership theory. Again, these findings proved that the headteachers practised the supportive

leadership most, while the achievement-oriented leadership was the least practised among the headteachers.

3.2 Relationship between Headteachers’ Leadership Practices and Learners’ Academic Achievement in the Public Basic Schools

The objective was to determine whether there was a relationship between the leadership practices of the headteachers and the academic achievement of the learners. This was examined using the Pearson Product Moment correlation, and the results are presented in Table 3.

Table 3: Pearson Correlation Matrix for Leadership Practices and Academic Achievement

Variables		1	2	3	4	5	6
1. Overall Leadership Practice	Pearson Correlation Sig. (2-tailed)	1					
2. Directive leadership	Pearson Correlation Sig. (2-tailed)	0.839*	1				
3. Supportive leadership	Pearson Correlation Sig. (2-tailed)	0.862*	0.590*	1			
4. Participative leadership	Pearson Correlation Sig. (2-tailed)	0.847*	0.572*	0.716*	1		
5. Achievement-oriented leadership	Pearson Correlation Sig. (2-tailed)	0.716*	0.646*	0.444*	0.383*	1	
6. Academic Achievement	Pearson Correlation Sig. (2-tailed)	0.708*	0.771*	0.505*	0.542*	0.533*	1

n=301 *Correlation is significant at $p < 0.05$ (2-tailed)

Source: Fieldwork Data, 2023

Based on Kothari’s (2004) suggestion, the results revealed that generally there was a strong and statistically significant positive relationship between leadership practices and academic achievement ($r=0.708$, $p < 0.05$, 2-tailed). The findings further showed a strong and statistically significant positive relationship between directive leadership and academic achievement ($r=0.771$, $p < 0.05$, 2-tailed). The findings also established that there was a strong and statistically significant positive relationship between supportive leadership and academic performance ($r=0.505$, $p < 0.05$, 2-tailed). Furthermore, the findings revealed that there was a strong and statistically significant positive relationship between participative leadership and academic achievement ($r=0.542$, $p < 0.05$, 2-tailed). Finally, the findings established that there was a strong and statistically significant positive relationship between achievement-oriented leadership and academic achievement ($r=0.533$, $p < 0.05$, 2-tailed). Based on these findings, the researcher concluded that leadership practices among the headteachers were linked to the academic achievement of the learners in the Municipality.

4.0 DISCUSSION

The data indicated that they practised all the leadership behaviours in the path-goal theory. This finding supports Stogdill's (1999) observation that the leadership behaviours in the path-goal model are not mutually exclusive and that a leader can adopt them at different times and in different situations. However, the results showed that the headteachers practised the supportive leadership most ($M=35$, $SD=1.513$), followed by directive leadership ($M=29$, $SD=1.564$), then participative leadership ($M=27$, $SD=1.820$) while the achievement-oriented leadership was least practised among the headteachers ($M=25$, $SD=1.185$). This finding is inconsistent with the results of a study carried out by Azaare and Gross (2011) where they found that leaders mostly practised the directive leadership. However, the finding of this study agrees with previous studies by Ibrahim and Shakya (2013), and Giltinane (2013) where it was established that leaders highly used the participative and supportive leadership. These findings suggest that the leadership schemes within the Path-goal theory were common among the headteachers.

The data further revealed that generally there was a strong and statistically significant positive relationship between leadership practices and academic achievement ($r=0.708$, $p<0.05$, 2-tailed). For the individual leadership practice, the results showed that there was a strong and statistically significant positive relationship between supportive, participative, and achievement-oriented leadership and academic achievement. These results confirm the outcome of previous studies (Paracha et al., 2012; Shafie et al., 2013; Obicci, 2015) where they discovered that leadership practices had a positive relationship with academic achievement. However, the findings depart from Akerele's (2007) results that there was no significant relationship between leadership practices and academic achievement in Nigeria. Besides, Akerele (2007) found that students performed better in schools having heads practising participative leadership most which agrees with the findings of this study. Likewise, the findings of this study disagree with Ijaiya (2000) where it was revealed that participative leadership enhanced academic achievement among students. Therefore, we the researchers conclude that one strategy to enhance the academic achievement of learners in the Municipality is to support and encourage headteachers to practice the various leadership types in the Path-goal leadership theory.

4.1 Limitations of the Study

The leadership practices of the headteachers reported in this study were based on the perception, and therefore represent their subjective view at the time of data collection. Although we attempted to reduce the subjectivity of the responses by triangulating both headteachers' and teachers' opinions, it is difficult to be certain that the findings reported in the study would be the same after the fieldwork. Therefore, the findings of the study may not be generalized beyond the time and setting of the study.

4.2 Conclusions and Recommendations

A major finding of the study was that although the headteachers highly practised all the leadership in the Path-goal leadership theory, the findings revealed that the headteachers practised the supportive leadership mostly, followed by directive leadership, participative leadership while the

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achievement-oriented leadership was least practised among the headteachers. Therefore, the study concluded that the headteachers practised their leadership within the Path-goal leadership theory. Therefore, the headteachers set goals and guide the followers towards the achievement of the goals. Also, generally, the study established that the practice of leadership related positively and significantly to the academic achievement of the learners. Again, supportive, supportive, directive, and achievement-oriented leadership related positively and significantly with academic achievement. The study showed that supportive, participative, directive, and achievement-oriented leadership had a positive and significant correlation with academic performance. This implies that the leadership practices of the headteachers are important in enhancing the academic achievement of learners in the Municipality.

Based on these findings, the study recommended that:

1. education stakeholders in the Asokwa Municipal Education Directorate should pay attention to the leadership practices of the headteachers if they desire to optimise academic achievement among learners.
2. The Asokwa Municipal Education Directorate of the Ghana Education Service should organise in-service training programmes on the effective application of the Path-Goal leadership theory for the headteachers to enable them to enhance the academic achievement of the learners.

DECLARATION

Data Availability

Data that supports the findings of the study was collected through questionnaire. Access to the data can be requested from the authors subject to appropriate ethical approval.

Declaration of Conflicts of Interest

The authors declare no conflict of interest.

Ethics Approval and Consent to Participate

Ethical approval was sought from the gatekeepers prior to the study. Written informed consent was sought and obtained from the participants before data collection commenced.

Funding

No funding was received for this study.

Acknowledgements

The authors acknowledge the support of headteachers and teachers who voluntarily participated in the study. We also appreciate the permission granted by the education directorate where the study was carried out.

REFERENCES

- Achombo, C. N. (2010). *Factors affecting the academic performance of pupils in primary schools in Paidha Town Council*, Unpublished Thesis, Makerere university, Kenya.
- Adeyemi, T. (2010). Principals' leadership behaviours and teachers' academic performance in senior secondary schools in Ondo State, Nigeria. *Journal of Education Administration and Policy Studies*, 2(6), 83-91.
- Akerele, S. A. (2007). *Principals' leadership behaviours and teachers' academic performance in Lagos State Public Secondary Schools*. Unpublished M. Ed Thesis, University of Ado-Ekiti, Nigeria.
- Ali, N., Jusoff, K., Ali, S., Mokhtar, N., & Salamt, A. S. A. (2009). The Factors Influencing Students' Performance at Universiti Teknologi MARA Kedah, Malaysia. *Canadian Research & Development Centre of Sciences and Cultures*, 3(4), 23-53.
- Azaare, J., & Gross J. (2011). The nature of leadership style in nursing management. *Br J Nurs.*, 20(11), 672-80.
- Babbie, E. (2010). *The practice of social research* (12th ed.). Belmont, CA: Wadsworth.
- Beardwell, J., & Claydon, T. (2007). *Human Resource Management: A Contemporary Approach*. London: Prentice Hall.
- Blase, J., & Blase, J. (2000). Effective instructional leadership: Teachers' perspectives on how principals promote teaching and learning in schools. *Journal of Educational Administration*, 38(2), 130-141.
- Cohen, L., Manion, L. & Morrison, K. (2018). *Research methods in education* (8th Ed.). London: Routledge.
- Crum, K., & Sherman, W. (2008). Facilitating high achievement: High school principals' reflections on their successful leadership practices. *Journal of Educational Administration*, 46(2), 562-580.
- Education Improvement Research Centre (2022). Instructional leadership – leading the teaching and learning. *Spotlight*, 1(1), 1–12.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction*. Boston: Pearson Education.
- Ghana News Agency (2018). *BECE candidates urged to improve performance*. Kumasi.
- Ghana/otecfmghana.com (2019). *Academic performance in Asokwa Municipality*. Kumasi.
- Giltinane, C. L. (2013). Leadership behaviours and theories. *Nursing Standard*, 27(41), 35–39.
- Glanz, J., & Zepeda, S. (2016). *Supervision: new perspectives for theory and practice*. New York, NY: Rowman & Littlefield.
- Graphic Online (2019). *Asokwa Municipal Assembly organises mock exams for BECE candidates*. Accra.
- Hartati, S., Fauzi, A., & Zohriah, A. (2024). Analysis of the goal path leadership model: A literature review on its effect on performance and motivation. *JKPI: Jurnal Konseling Pendidikan Islam*, 5(2), 293–300.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. London & New York: Routledge.

- Hersey, P., Blanchard, K., & Johnson, D. E. (1996). *Management of Organizational Behaviour: Utilizing Human resources*. New Jersey: Prentice Hall.
- House, R. J., & Mitchell, T. R. (1974). Path-Goal Theory of Leadership. *Journal of Contemporary Business*, 3(3), 81-98.
- Hoy, W. K., & Miskel, C. G. (2001). *Educational administration: Theory, research, and practice* (6th ed.). Boston: McGraw Hill.
- Ibrahim, A. S., & Shakya, T. (2013). Principal leadership behaviour, school performance, and principal effectiveness in Dubai schools. *International Journal of Research Studies in Education*, 2(1), 41-54.
- Ijaiya, N. Y. (2000). Failing schools' and national development: Time for reappraisal of school effectiveness in Nigeria. *Nigerian J. Edu. Res. Eva.*, 2(2), 42-45.
- Jaskaran, S. D., & Sri-Guru, G. S. (2014). Challenges of Organizational Behaviour: Leadership and its Impact on Performance of Employees: A case Study of a Public Sector Bank in Mohali. *Journal of Business Management & Social Sciences Research*, 3 (11), 33-50.
- Jones, M., & Rattray, J. (2010). *Questionnaire design* (6th ed.). Oxford: Wiley-Blackwell.
- Kothari, C. R. (2004). *Research methodology, research and techniques*. New Delhi: New Age International Publishers.
- Lunenburg, F. C., & Ornstein, A. C. (2000). *Educational administration: Concepts and practices*. Belmont: Wadsworth/Thomson Learning.
- Lussier, R. N., & Achua, C. F. (2001). *Leadership: Theory, application and skill development*. USA: South-West College Publishing.
- Luthan, F. (2002). *Organizational Behaviour*. New York: New McGraw Hill Book Company.
- Mora-Ruano, J. G., Schurig, M., & Wittmann, E. (2021). Instructional leadership as a vehicle for teacher collaboration and student achievement: What the German PISA 2015 sample tells us. *Journal of Frontiers in Education*, 6(1), 1–12.
- Negron, D. (2008). *A case study examining the relationship of the path-goal theory leadership behaviours to profits in El Paso, Texas, Rent-A-Center stores* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 3331408). Capella University.
- Neuman, W. L. (2009). *Social research methods: Qualitative and quantitative approaches*. USA: Allyn and Bacon.
- Njuu, D. B., Njihia, R., & Mwal'wa, S. (2023). Influence of headteachers' leadership styles on students' academic performance in public secondary schools in Dodoma Urban District, Tanzania. *European Journal of Education Studies*, 10(10), 243–259.
- Northouse, P. G. (2019). *Leadership: Theory and practice*. Thousand Oaks: Sage.
- Nuthana, P., & Yenagi, G. V. (2009). Influence of study habits, self-concept on academic achievement of boys and girls. *Karnataka J. Agric. Sci*, 22 (5), 1135-1138.
- Obicci, P. A. (2015). Effects of ethical leadership on employee performance in Uganda. *Net Journal of Business Management*, 3(1), 1-12.
- Onoye, F. O. (2022). Challenges encountered by principal in improving students' academic performance in secondary schools in Isuikwuato Lga of Abia State. *Unizik Journal of Educational Research and Policy Studies*, 11(1), 1–6.

Kpodoma et al. (2024), Vol. 5, Iss. 1, Pg. 21-39
<https://doi.org/10.5281/zenodo.13958256>

- Otoo, D. (2007). *Comparative study of academic performance of public and private J.S.S graduates: A case study of selected schools in the Kumasi Metropolis*. Unpublished Thesis.
- Paracha, M. U., Qamar, A., Mirza, A., Hassan, I. U., & Waqus, H. (2012). Impact of leadership behaviour (transformational and transactional leadership) on employee performance and mediating role of job satisfaction, study of private school (Educator) in Pakistan. *Global Journal of Management and Business Research*, 12(4), 55-64.
- Pacia, D. R., & Guevarra, P. M. (2023). Influence of path-goal theory of leadership styles and the moderating role of task structure in leadership on teachers' satisfaction, motivation, and performance. *International Journal of Multidisciplinary: Applied Business and Education Research*, 4(7), 2330–2345.
- Phillips, J. M., & Gully, S. M. (2012). *Organizational behaviour tools for success*. Mason: South-Western Cengage learning.
- Polit, D. F., & Beck, C. T. (2018). *Essentials of nursing research: Appraising evidence for nursing practice* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.
- Rahmawati, L., Aini, N., Pradana, F. A., Ansori, I., Trunojoyo, U., Alamat, M., J., Telang, R., Utm, K., & Kamal-Bangkalan, P. O. (2023). Kajian Kepemimpinan Path Goal Theory: Literature Review. *Jurnal Riset Dan Inovasi Manajemen*, 1(3), 197–223.
- Shafie, B., Baghersalimi, S., & Barghi, V. (2013). The relationship between leadership behaviour and employee performance, case study of real estate registration organization of Tehran province. *Singaporean Journal of Business Economics and Management Studies*, 2(5), 21-29.
- Shahab, M. A., & Nisa, I. (2014). The influence of leadership and work attitudes towards job satisfaction and performance of employees. *International Journal of Managerial Studies and research*, 2(5), 69-77.
- Stogdill, R. M. (1999). Personal Factors Associated with Leadership: A Survey of the Literature. *Journal of Psychology*, 25(3), 35-71.
- Tarabishy, A., Solomon, G., Fernald, L. W. & Sashkin, M. (2005). The Entrepreneurial Leaders' impact on the Organization's Performance in Dynamic Markets. *Journal of Private Equity*, 8 (4), 20-29.
- Umara, K., & Hota, H. N. (2024). Impact of supportive and achievement oriented administrative style of head of departments on effective teaching and learning among lecturers in tertiary institutions in Borno State. *Journal of Research Administration*, 6(1), 1126–1139.
- Vecchio, R., Justin, J., & Pearce, C. (2008). Empowering leadership: An examination of mediating mechanisms within a hierarchical structure. *The Leadership Quarterly*, 21(3), 530-542.
- Wu, D., Gao, H., & Shen, A. (2020). Coaching leadership and subordinates' career success: The mediating role of leader–member exchange. *Social Behaviour and Personality: An International Journal*, 47(11), 8391-8406.