

INSTRUCTIONAL SUPERVISION SELF EFFICACY AND ACADEMIC ACHIEVEMENT IN KAKAMEGA COUNTY PRIMARY SCHOOLS, KENYA

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Abstract

This paper explored the relationship between head teachers' instructional supervision self-efficacy and pupils' academic achievement in public primary schools in Kakamega County, Kenya. The study was guided by Bandura's self-efficacy theory and adopted the correlational research design. It targeted 916 public primary school head teachers. Stratified, proportionate and simple random sampling techniques were used to select the 282 head teachers who participated in the study. Data was collected using a head teachers' questionnaire, which was validated through expert judgement. It was deemed reliable as it yielded a coefficient of 0.871. Data was analysed with the aid of the Statistical Package for Social Science. The Pearson's correlations test was used to determine the relationship between head teachers' instructional supervision self-efficacy and pupils' academic achievement. The findings indicated that the pupils' academic achievement was below average while head teachers' supervision of instruction self-belief was moderately strong. A positive and statistically significant relationship was observed between head teachers supervision of instruction self-belief and pupils' academic achievement, $r(282) = .572, p < .05$. This paper concludes there are other factors that affect pupils' academic achievement besides head teachers' instructional supervision self-efficacy. It also concludes that pupils in schools managed by head teachers with strong instructional supervision beliefs tend to do better academically. It recommends that to improve achievement, primary school educators should focus on factors which affect it such as provision of adequate instructional materials, adoption of appropriate teaching approaches, creating a conducive teaching-learning environment among others. Head teachers' instructional supervision beliefs should also be enhanced through training and exposing them to experiences that enhance their self-confidence and motivation.

Keywords: *academic achievement, instructional supervision, self-efficacy*

Introduction

The success of any education system depends on primary education since other levels of schooling are built upon it (Al-Zaman et al., 2024). Primary education refers to formal training given to children aged 6 to 11 plus in schools (Irungu et al., 2024). It is the first stage of schooling that follows pre-school/kindergarten and precedes secondary school education. Primary school education forms the foundation of a child's academic journey and plays a crucial role in shaping the future of individuals and nations alike (Kryshtanovych et al., 2022). This level of education focuses on equipping learners with basic literacy, numeracy and knowledge and skills across various subjects (Veermans, 2022). In Kenya, the goals of primary school education are to facilitate learners' acquisition of literacy, numeracy, creativity and communication skills and develop desirable social standards, moral and religious values (Kenya Institute of Curriculum Development [KICD, 2019]).

The education sector in Kenya is currently undergoing a significant transformation with the phasing out of the 8-4-4 system and introduction of the Competency-Based Curriculum (CBC) in 2017 (Sifuna & Obonyo, 2019). This curriculum emphasizes skill development and

competency building over knowledge acquisition. Its implementation has generated mixed reactions from education stakeholders (Onderi & Makori, 2023). Teachers have reported improved pupils' engagement and creativity, and highlighted implementation challenges such as inadequate preparation and resource constraints. Parents have also expressed concerns about the high costs of implementing the curriculum and its complexity.

The objectives of primary school education are equipping learners with knowledge and skills among others (Njuguna, 2021). One way of ascertaining whether these objectives have been achieved is through national examinations. Under the 8-4-4, it was the Kenya Certificate of Primary Education (KCPE) examination while under the current CBC it is the Kenya Primary School Education Assessment (KPSEA). Results from the Kenya National Examination Council (KNEC) show that pupils' academic achievement in primary schools nationally as measured by their scores in KCPE, have generally been below average. For instance, the mean scores for the years 2018, 2019, 2020 and 2022 were 249.66, 249.12, 249.33 and 251.93 respectively (KNEC, 2019, 2022). This data is evidence that pupils' academic achievement nationally has been unsatisfactory, given that KCPE is marked out of 500. The data is a pointer that most pupils do not possess the requisite knowledge and skills and may face learning difficulties when they transition to secondary schools. Unsatisfactory achievement in KCPE has also been observed in several counties among which is Kakamega. Pupils' KCPE mean scores in the county for the years 2019, 2020, 2021 and 2022 were 248.88, 245.83, 241.26 and 231.73 respectively (KNEC, 2020, 2023). The data shows that pupils' performance in KCPE in Kakamega County was lower than the national averages. This partly explains why the study was conducted in the county, to examine causes of the unsatisfactory achievement and recommend ways of enhancing it.

Empirical studies indicate that pupils' academic achievement is influenced by several factors (Alam & Islam, 2022, Kassaw & Demareva, 2023; Irungu et al., 2024). Smith and Brown (2023) noted that socioeconomic status of households positively influenced academic achievement of learners. Parental involvement in their children's education has been recognized as a critical factor in students' success in academics (Garcia & Martinez 2022). Wilson et al. (2023) established that schools with conducive climates characterized by strong student-teacher relationships and a sense of safety and belonging perform better in academics. Kimani and Njeru (2023) and Lee et al. (2021) observed that that schools with adequate instructional materials and physical facilities posted higher mean scores in national examinations. Mutinda et al. (2024) demonstrated that teachers' qualification, experience and professional development were critical factors in students' achievement. Mwangi and Githinji (2023) noted that learners characteristics such as gender, motivation and attitudes affected their academic achievement. Supervision of instruction has also been associated with learners' academic achievement (Nshimiyimana & Sikubwabo, 2022).

Supervision of instruction is one of the most important management activities in schools as it facilitates learning and supports effective teaching (Kituku et al., 2020). Supervision of instruction is the act or function of professionally overseeing teachers' implementation of curricula in learning institutions for achievement of set educational outcomes (Obasi & Agama, 2023). It is characterized by institution leaders guiding, assisting and sharing ideas with teachers to assist them improve teaching and learning and provide quality education (Ashun & Acquah, 2021). In primary schools, it involves school heads ensuring that teachers implement the curriculum effectively through planning and organizing, maintaining a good teacher-pupil relationship, using appropriate teaching aids and teaching methods during

instruction (Ngu et al., 2023). Effective instructional supervision enhances academic achievement because through it school heads set the pace; leading and monitoring staff and students to perform to their best (Muhire & Andala, 2023). Instructional supervision self-efficacy has also been cited as a significant predictor of academic achievement (Massengill, 2018).

Self-efficacy has been defined as belief in one's capabilities to organize and execute courses of action required to produce specified result (Cheng et al., 2023). It is concerned with confidence in one's ability to organize and execute a given course of action to solve problems or accomplish tasks. Self-efficacy is perceived to be a significant mediator of behaviour as it influences course of action taken by an individual, the amount of effort they expend, their resilience, as well as their persistence in the face of obstacles (Bandura, 1977). It also influences people's thoughts and feelings as individuals with low self-efficacy tend to view tasks as more difficult than they actually are. On the contrary, high self-efficacy levels create a feeling of confidence even in face of difficult situations (Skaalvik, 2020). Instructional supervision self-efficacy is therefore concerned with head teachers' beliefs in their ability to direct, stimulate and motivate teachers and pupils to enhance teaching and learning for improved academic performance.

Empirical studies reveal that head teachers' instructional supervision beliefs impact positively on academic achievement of learners in the institutions they lead (Cheng et al., 2023; Skaalvik, 2020). McBrayer et al. (2020) demonstrated that school administrators' beliefs in their capacities to supervise instruction affected performance of related tasks and learners' academic achievement. Similarly, Bouchamma et al. (2019) noted that beliefs in ability to create a conducive environment for teaching and learning, avail instructional materials, motivate teachers and learners and improve academic achievement affected school principals' realization of set educational goals. Madhuri and Saini (2019) contend that strong instructional supervision self-efficacy affects the way school leaders handle challenges and performance their responsibilities. These observations are in tandem with Bandura's (2006) contention that those who have high levels of self-efficacy are more likely to attempt challenging tasks, persist longer at them, and put in more effort in order to achieve the expected outcomes.

The forgoing discussions show that instructional supervision self-efficacy is a predictor of learners academic achievement. It possible that the unsatisfactory academic achievement of pupils in public primary schools in Kakamega County could have been influenced by head teachers' instructional supervision self-efficacy. This called for an inquiry given that there is dearth in literature that links instructional supervision self-efficacy and pupils' academic achievement in primary schools in Kakamega County. It is against this background that this paper explored the relationship between head teachers' instructional supervision self-efficacy and pupils' academic achievement in the county.

Hypothesis

HO₁ Relationship between head teachers' instructional supervision self-efficacy and pupils' academic achievement is not statically significant.

Methodology

This study employed the correlational research design. Pawar (2020) contends that correlational designs are ideal for exploring relationships among variables without manipulating them, as was the case during this inquiry. The study was conducted in public primary schools in Kakamega County. It targeted 916 head teachers and involved a sample of 282 head teachers who were selected using stratified, proportionate and simple random sampling techniques.

Instructional supervision self-efficacy and pupils' academic achievement data were gathered using a head teachers' questionnaire. The head teachers' instructional supervision beliefs were measured using a set of 10 close ended items, which were based on a 5 points scale. The scale was, 5 = Very Strong Belief, 4 = Strong Belief, 3 = Moderate Belief, 2 = Weak Belief and 1 = Very Weak Belief. For instance, they were asked to rate their believes in ability to visit classes for improved teaching and learning. The scale was deemed appropriate because self-efficacy are beliefs, which ranges from weak to strong (Clark & Raker, 2021). The face and content validity of the instrument was checked through expert judgement and its reliability estimated using the Cronbach Alpha method. The instrument was reliable as it yielded a reliability coefficient of 0.763. The collected data was cleaned and analyzed with the aid of the Statistical Package for Social Science. Frequencies and percentages were used to summarize qualitative data. The study hypothesis which stated that the relationship between instructional supervision self-efficacy and pupils' academic achievement is not statistically significant was tested at .05 significance level using the Pearson's correlations test.

Results and Discussion

The head teachers' responses to item that were used to measured their instructional supervision self-efficacy were scored, their means calculated and transformed into the overall mean score as shown in Table 1.

Table 1

Instructional Supervision Beliefs (n = 282)

Belief in ability to:	Mean	SD
Visit classes frequently for improved teaching.	3.89	1.05
Check pupils' written assignments to ascertain they engage in learning activities.	3.26	0.87
Ensure teachers prepare pupils records on time.	3.76	0.96
Organize staff meetings to discuss class assessment reports	3.01	1.02
Facilitate teachers' attendance of capacity building programmes.	3.45	1.59
Follow a well prepared daily work plan.	3.12	1.00
Ensure availability of adequate teaching/learning resources.	3.43	0.80
Keep staff attendance registers	3.29	1.61
Oversee timely completion of the syllabus.	3.61	0.89
Plan face-to-face staff meetings (planning sessions).	3.55	0.91
Instructional supervision self-efficacy overall mean	3.44	0.28

The mean scores of the item ranged between 3.01 (SD = 1.02) and 3.89 (SD = 1.05). The items with the highest mean scores were 'visit classes frequently for improved teaching' (M =

3.89, SD = 1.05) and ‘ensure teachers prepare pupils records on time’ (M = 3.76, SD = 0.96). This is an indication that the head teachers strongly believed in their abilities to perform these two tasks. The lowest item means were posted by ‘organize staff meetings to discuss class assessment reports’ (M = 3.01, SD = 1.02) and ‘follow a well prepared daily work plan’ (M = 3.12, SD = 1.00). The relatively low item means implies that the head teachers’ belief in their ability to perform those tasks were moderately strong. The overall mean was at M = 3.44 (SD = 0.28), an indication that the head teachers’ belief in their instructional supervision self-belief was moderately strong. These findings are in tandem with those of Hanshi and Mosomi (2023) who found that secondary school principals in Mandera East Sub County had moderately strong beliefs in their instructional supervision abilities. However, these results contradict those of Skaalvik’s (2018) study that was based on a 7-point scale, which indicated that school principals’ instructional leadership self-efficacy (M = 5.22, SD = 0.58) was high. The observed moderate instructional supervision self-efficacy of the headteachers may have a bearing on how they performance their responsibilities as school heads, given that empirical studies show that the two are related.

Pupils’ academic performance was determined by averaging their KCPE mean scores for the years 2018 to 2022, as presented in Table 2.

Table 2

Pupils mean KCPE mean scored for the years 2018 to 2022 (n = 282)

Year	Mean (maximum = 500)	SD
2022	231.73	8.66
2021	241.26	6.14
2020	245.83	5.13
2019	248.88	4.22
2018	253.80	5.05
Overall mean score	244.30	5.14

The results show that the mean scores for the 5 years ranged between 231.73 (SD = 8.66) and 253.80 (SD = 5.05). There was a steady decline in the mean scores with 2018 posting the highest while the lowest mean was recorded in 2022. The pupils’ academic achievement as measured by the overall mean score (M = 244.30, SD = 5.14) was below average. This is in concurrence with the findings of a study by Irungu et al. (2024) in Murang'a South Sub County and Werunga and Maragia (2022) in Migori County, which revealed that there has been a decline in learners’ academic achievement. Pupils in public primary schools have also been recording unsatisfactory academic achievement nationally as evidenced by results of KCPE summative evaluation (KNEC, 2020, 2024).

The relationship between instructional supervision beliefs and academic performance was determined by testing the paper hypothesis. The hypothesis stated that that the relationship between instructional supervision beliefs and academic achievement is not statistically significant. The test was conducted using the Pearson’s correlations procedure. The test results showed a positive and significant relationship between instructional supervision beliefs and academic achievement, $r(280) = .572$, $p = .000$. These results imply that head teachers’ instructional supervision beliefs is a correlate of pupils’ academic achievement.

They thus do not support the study hypothesis which stated that the relationship between instructional supervision beliefs and academic achievement is not statistically significant

These findings showed a significant relationship between head teachers' instructional supervision beliefs and pupils' academic achievement. They support those of a study by Zheng et al. (2019) which demonstrated that head teachers with higher levels of self-efficacy tended to be more effective leaders. This positively influenced various aspects of school functioning, including pupils' academic achievement. Ndlovu's (2020) study revealed that head teacher's instructional supervision self-efficacy was a major element in determining teaching staff self-efficacy levels, teaching readiness and pupil's academic achievement in Zambia. The findings of a study by Munyao et al. (2023) revealed that learners in schools led by head teachers with high self-efficacy performed better academically, as they supervised content delivery and learners' assessment effectively. These findings are also in harmony with Ochieng and Chepkemboi (2023) contention that head teachers who believe in themselves as competent leaders are effective supervisors of instruction, which boosts pupils' academic achievement.

Conclusions and Recommendations

This paper concludes that the head teachers' instructional leadership beliefs were moderately strong while the pupils' academic achievement was below average. The low achievement means that there are other factors besides head teachers' supervision self-efficacy that affect pupils' academic achievement. These could be factors that have been associated with performance such as availability of instructional materials, teacher and pupil factors, school climate among others. The paper also concludes that head teachers' instructional supervision beliefs is positively related to pupils' academic achievement. Pupils in schools headed by head teachers with strong instructional supervision beliefs tend to do better academically. Such school heads are more effective in organizing and supervising instruction, and directing, stimulating and motivating teachers and pupils. These lead to improved teaching and learning and academic performance.

Based on the findings, this paper recommends that to improve pupils' achievement, teachers in collaboration with school administrations should focus on factors that affect it. These include provision of adequate instructional materials, adoption of appropriate teaching approaches, creating a conducive teaching-learning environment among others. The head teachers' instructional supervision beliefs also need to be enhanced since they were moderately high. This can be achieved by exposing them to experiences that enhance their instructional supervision self-efficacy like training, confidence building, and motivating them to perform their duties effectively.

There is also need for further inquiry given that contradictory nature of the results, moderately strong head teachers' instructional supervision beliefs, unsatisfactory performance and a significant relationship between the two variables. The inquiry should establish whether the contradiction is due to presence of mediating or moderating factors that affect achievement.

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