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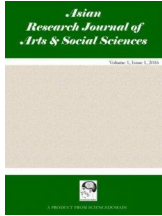
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## Strategies for Enhancing Teachers' Self-efficacy in Secondary Schools

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### Authors' contributions

This work was carried out in collaboration between all authors. Author SJOO designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript. All authors read and approved the final manuscript.

### Article Information

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### ABSTRACT

**Aim:** To determine strategies for enhancing self-efficacy among secondary school teachers.  
**Sample:** The study population was 1790 teachers in 143 public secondary schools from which a sample of 12 teachers was drawn using strategic sampling.  
**Study Design:** A mixed method approach and a concurrent triangulation design were adopted.  
**Place and Duration of Study:** Teachers in public secondary schools in Kisumu County, Kenya, between June 2016 and September 2016.  
**Methodology:** Interview schedule was used to collect qualitative data. Interview schedule was piloted with teachers who did not participate in the study to establish validity and reliability. Qualitative data was transcribed verbatim and analyzed thematically.  
**Conclusion:** The qualitative findings revealed that better remuneration, improvement in working conditions, capacity-building programs and facilitative style of leadership were effective strategies in enhancing teachers' self-efficacy.

Keywords: Self-efficacy; strategies; teachers; leadership; capacity-building; remuneration.

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## 1. INTRODUCTION

### 1.1 Background of the Study

Teacher's self-efficacy, a construct derived from [1] Social Cognitive Theory, is the personal belief of possessing the ability to perform professional tasks with mastery [2]. Self-efficacy beliefs, therefore, influence what people will attempt to do, amount of effort expended, length of perseverance, and their response to failure [3].

[4] and [5] found out that teachers' self-efficacy determines their levels of effectiveness, innovativeness and persistence in the performance of their professional duties. Furthermore, [4] found that teachers with a stronger sense of efficacy were better in planning and organizing their work, more open to new ideas and innovative, more persistent and resilient and less critical of students than those teachers with lower self-efficacies were. Additionally, [6] reported that teachers' self-efficacy is important because it has a positive relationship between teachers' self-efficacy and students' academic performance.

According to [1], there is a triadic relationship among personal factors, behavioral characteristics and environmental factors. Environmental factors include remuneration, working conditions, professional development programs and leadership style. On the other hand, the behavioral characteristic consisted of self-efficacy [7,8,9].

The environmental factors therefore, can reinforce or extinguish the behavior characterized by self-efficacy. Reinforcement in social cognitive theory is a construct that ties the reciprocal relationship between behavior and environment [10,7]. Revealed that reinforcement was efficacious in maintaining behavior. However, the ability of reinforcement to enhance self-efficacy was not considered in the experiment. In addition, the experiment did not consider whether environmental factors such as remuneration, working conditions, professional development programs and leadership style could be used to enhance teachers' self-efficacy.

### 1.2 Statement of the Problem

Teachers' self-efficacy in parts of Kisumu County in two educational domains were found to be low [11,12,13]. Highlighted the importance of self-

efficacy in Kisumu Municipality when they found that self-efficacy has an influence on students' career aspirations and performance in examinations. On the other hand [11] and [12] in Kisumu East and Kisumu Municipality found low teachers' self-efficacies in special needs and HIV&AIDS education respectively. However, the studies by [13,11] and [12] were content-specific and did not consider the teachers' self-efficacy in all content areas. Furthermore, the studies were conducted only in certain parts of Kisumu County. Moreover, they did not investigate the strategies that might be used to enhance teachers' self-efficacy.

Seminars and workshops have also not been used to address the low teachers' self-efficacy suggested by transfer requests and resignations among teachers in Kisumu County. According to [14], seminars conducted by the County Director of Education office between January 2011 and December 2015 for teachers were on child protection, school dropout and exam rating. Other issues dealt with were exam malpractices, free primary education and free day secondary education. Information and Communication Technology (ICT) integration and performance appraisal were also tackled in seminars and workshops. However, none of the seminars and workshops dealt with how to enhance the self-efficacy of teachers and yet studies have shown the importance of teachers' self-efficacy in influencing students' performance. Therefore, the current study sought to determine the strategies for enhancing teachers' self-efficacy.

## 2. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

### 2.1 Theoretical Framework

The construct of teachers' self-efficacy was taken from [1] social cognitive theory, which adopts an agentic perspective where people intentionally influence their functioning through self-directed goal tendency to achieve self-development [15]. The social cognitive theory has key constructs, which include reciprocal determinism, self-efficacy, reinforcement, observational learning, behavioral capability and expectations [10].

[16] postulated that the sources of self-efficacy are mastery experiences, physiological and emotional cues, vicarious experiences, and verbal persuasion. Consequently, the theory posited that teachers' self-efficacy might be

enhanced when they obtain mastery experiences and physiological and emotional cues. In addition, the theory also posited that teachers' self-efficacy through models that facilitate vicarious learning experiences and significant others that verbally reinforce their behavior.

However, [1] did not consider the influence of environmental factors, such as remuneration, capacity building programs, leadership styles and working conditions, in enhancing self-efficacy. Therefore, the present study sought to investigate strategies for influencing teachers' self-efficacy using remuneration, capacity-building programs, leadership styles and working conditions in Kenyan secondary schools.

## **2.2 Literature Review**

Review of literature indicated that teachers' self-efficacy might be enhanced through better remuneration, improvement of working conditions, provision of capacity building programs and facilitative style of leadership. Remuneration in the present study referred to the money teachers are paid for their professional service by their employer. Working conditions in the present study referred to the conditions in which teachers work characterized by the teaching and learning facilities and welfare programs. In addition, in the present study, capacity building referred to facilitating teachers to acquire new or reinforce old knowledge, skills and attitudes to perform their professional functions better. Facilitative style of leadership in the present study meant the school administration adopts a leadership style that supports teachers' professional development and goal achievement.

### **2.2.1 Influence of remuneration on teachers' self-efficacy**

Remuneration had been highlighted as being able to enhance teachers' self-efficacy [17]. The study by [17] reviewed evidence in a secondary research on the motivating influence of pay on employees and found that it is an important general motivator although the motivational influence of money is nonlinear across pay levels all over the world. The meta-analytic results revealed that performance contingent pay worked best in enticing people to attain higher performance levels. Furthermore, the study found out that employees react strongly to changes in pay that affect their standing relative to some important standard such as what their

academic peers earn. The study recommended that current pay systems should be evaluated with respect to the strength of pay-performance relationships. Therefore, it remained to be investigated whether employees such as teachers could be influenced by remuneration in a manner that enhances their self-efficacy.

Self-efficacy has been demonstrated to affect work performance [4,5]. Therefore, Hameed, [18] and [19] investigated how to increase employee performance using reward motivators in Pakistan in a quantitative survey. The outcomes revealed positive and significant impact of incentive motivators on employee performance. However, the study investigated the impact of incentives on performance among bank employees and not the influence of remuneration on teachers' self-efficacy. Therefore, the impact of remuneratory incentives on teachers' self-efficacy remained to be investigated.

In addition, [20] conducted a study using the experimental research design on the effect of reward as a moderator on the relationship between self-efficacy and work performance. The study found out that reward moderates the effect of self-efficacy on performance. Similarly, [21] investigated the relationship between teacher pay and school productivity in England. The paper reported that teacher wages are set in flat wages across heterogeneous labour markets, which created a gap between the outside labour market and the wage for teachers. They found out that lower salaries reduced teachers' performance that was seen in a drop in school performance. Since self-efficacy affects teachers' performance and consequently school performance, the findings of [21] and [20] suggested, however only by implication, that salary might enhance teachers' self-efficacy. Therefore, the present study sought to investigate remuneration as a strategy to enhance teachers' self-efficacy.

Moreover, [22] investigated the relationship monthly salary with perceived self-efficacy in Taiwan using a cross-sectional quantitative survey. The study found out that nurse practitioners in the high monthly salary group had significantly higher self-efficacy than nurse practitioners in the medium and low monthly salary group did. The study concluded that monthly salary contributed to nurse practitioners' self-efficacy. However, the study was conducted with a sample made up of nurses whose working conditions might be different from teachers who were the respondents in the present study.

These studies indicated that there might be a relationship between remuneration and self-efficacy. Therefore, although the studies did not sample teachers, it might be surmised that remuneration might be used to enhance teachers' self-efficacy. Consequently, the present study sought to investigate if remuneration can result in enhanced self-efficacies among teachers.

### **2.2.2 Influence of working conditions on teachers' self-efficacy**

According to [23] improvement of working conditions might be used to enhance teachers' self-efficacy. [23] studied teacher self-efficacy as a personal resource factor that may protect from the experience of job strain and burnout. The study sample was drawn from Syrian and German teachers in a cross-sectional and longitudinal descriptive study design. The results revealed a positive influence of teacher self-efficacy on job strain and burnout, particular for younger teachers. The study recommended that improvement of working conditions to eliminate or reduce job strain can increase teachers' self-efficacy levels. However, the study was on teacher self-efficacy and teachers' job strain and not enhancing teachers' self-efficacy through improvement of working conditions.

On teachers' effectiveness [24] explored strategies applied to cope with challenges inhibiting effective implementation of basic education curriculum in Kenya. Data analysis revealed that insufficient physical facilities and instructional resources hampered effective implementation of the curriculum in Kenya. The study recommended that provision of instructional resources would enhance teachers' effectiveness. The study, however, did not consider whether provision of instructional resources might enhance teachers' self-efficacy. The present study sought to fill this gap in literature by studying working conditions as a means of enhancing teachers' self-efficacy.

A component of working conditions, which is welfare programs, was investigated by [25] therefore, wrote a paper on the influence of employee welfare programs on improving labor productivity in Nigeria. The paper argued that employee welfare programs could help to improve workers' good feelings towards their job shown in high morale and sense of security. The study helped to point out the relationship between welfare programs and the psychological

state of staff. However, the study did not consider the effect of welfare programs on employees' self-efficacy, and this gap was filled by the current study.

In addition [26] in Kenya investigated the influence of employee welfare programs on employees. Data obtained through stratified random sampling technique and collected using questionnaire were analyzed using descriptive statistics. The study found out that improving the employee-welfare programs improved the self-efficacy of the employees, which led to an increase in workers' productivity. Therefore [26] helped to show the ability of welfare programs to enhance employees' self-efficacy. However, the study was conducted on employees in flower farms whose working conditions might be different from those in which teachers work.

The studies by [23,24,25] and [26] therefore, indicated that self-efficacy might be enhanced by improved working conditions. It remained to be investigated, therefore, whether teachers' self-efficacy can be enhanced by an improvement of their working conditions. Consequently, the present study sought to investigate improvement of working conditions as a strategy for enhancing teachers' self-efficacy in secondary schools.

### **2.2.3 Influence of capacity building programs on teachers' self-efficacy**

Thirdly, literature review also indicated that provision of capacity building programs could enhance self-efficacy. In the Guidelines for counselling in the workplace by the British Association for Counselling and Psychotherapy (BACP) [27] argued that a workplace counsellor helps employees deal with such issues as conflict, stress-related absence, work-related trauma and workplace harassment or bullying. The benefits of counselling, according to [27] include improved work effectiveness. Therefore, provision of counselling services would result in enhanced self-efficacies among teachers.

Direct teaching of the participants in a seminar or workshop has also been postulated for enhancing self-efficacy. A study by [28] investigated students' reading and writing performances in which vicarious learning was employed to enhance self-efficacy using secondary research in the USA. The study found that vicarious learning of desired behaviors enhanced students' self-efficacy. Therefore, the study recommended that students should be

taught through provision of similar models to enhance their learning. However, the study was conducted on enhancing students' self-efficacy and not on ways to enhance teachers' self-efficacy. Therefore, it remained to be investigated whether capacity building that involves training teachers might result in enhanced self-efficacy among the teachers.

[29] subsequently, investigated the impact of in-service training activities in a longitudinal action research study with Belgian participants. The participants reported increased competences at both content and skill levels after the in-service training. The study found that the effective ability of the participants increased, however, it did not examine whether their self-efficacy, which is their belief in their ability, also increased.

In addition, an integrative review of the influence of in-service training approaches on health workers' continuing professional education revealed that in-service training increased workers effectiveness [30]. The literature review was conducted from multiple databases to reveal that in-service training approaches enable trainees to process and apply information. This study further pointed out the importance of capacity building in enhancing effectiveness without indicating the effect of such training on self-efficacy.

Consequently [31] investigated the influence of in-service training courses on the teacher's attitude and performance in Iran. The study collected data from 100 teacher's trainees using an attitude questionnaire, checklist and interview. The results showed that the in-service training had a significant influence on teacher's attitude. The study recommended that in-service training should be used to improve teachers in their profession. However, the study investigated the influence of in-service training on teachers' attitudes and not on teachers' self-efficacies. The present study sought to fill this gap in literature.

Similarly, a study by [32] investigated teacher preparation and continuing professional development among Kenyan primary school teachers. The study argued that since quality of an educational system cannot be greater than the quality of its teachers, it was unfortunate that little research had been conducted on improving the quality of teachers. The study therefore recommended that more research should be done on factors that improve the quality of teachers, without zeroing in on teachers' self-

efficacy. However, the study drew its sample from primary school teachers whose professional qualifications might be lower than those of teachers in secondary schools might. Therefore, the present study sought to fill that gap by drawing its sample from secondary school teachers.

In addition, a study by [33] conducted a primary research on the influence of in-service teacher training on the performance of secondary school teachers in Kiambu County using descriptive survey design. Data was collected using structured questionnaire using systematic sampling was analyzed to reveal that in-service training improves teachers' effectiveness. The study therefore recommended that in-service of secondary school teachers should be improved so as to improve teachers' performance. However, although the study pointed out the effect of in-service training on teachers' effectiveness and performance, it did not consider the effect of in-service training on teachers' self-efficacy, and yet teachers' self-efficacy is the determinant of teachers' effectiveness and performance.

Therefore, previous studies by [28,29,30,31,32] and [33], revealed that capacity building programs such as in-service training is efficacious in increasing workers competencies, effectiveness and performance. However, none of these studies considered the effect of such capacity building programs on the self-efficacy of workers. Consequently, there remained a need to investigate whether teachers' self-efficacy might be enhanced using capacity building programs.

#### **2.2.4 Influence of facilitative leadership on teachers' self-efficacy**

Fourth, the adoption of facilitative leadership style was recommended as a strategy for improving teachers' self-efficacy. [34] wrote a paper on the role of facilitative leadership in project management and stated that facilitative leaders are those leaders who work hard to help team members reach their full potential. Nevertheless, it remained to be determined whether such enablement to reach full potential involves enhancement of self-efficacy.

A study by [35] investigated the indirect relationship between the leadership style and the school environment among schools in Kuwait and USA. The study found that the principal's

leadership style was related to school outcomes. The study recommended integrative leadership style that facilitate followers by empowering them to better school outcomes. However, while it might be surmised that such an integration of different leadership styles might include facilitative style of leadership, the study by [35] did not investigate facilitative leadership in particular. The present study therefore sought to investigate whether facilitative style of leadership might have an enhancing influence on teachers' self-efficacy.

[36] examined teachers' perceptions of their school leaders in a mixed methods study with a purposive sample from schools of the USA. The study recommended the use of transformational and passive avoidant leadership styles because they enhanced student achievement although it did not consider the effect of facilitative leadership on teachers' and students' performance. However, the study indicated that leadership styles affect the performance of the people who are led.

Subsequently, the importance of leadership style in teachers' performance was further highlighted in a study in Thailand. [37] sought to construct a conceptual framework of Structural Equation Modeling factors affecting job performance in Thailand. The study recommended transformational leadership because it had an influence on job performance. However, the study investigated the influence of leadership style on teachers' performance and not the enhancing influence of leadership style on teachers' self-efficacy.

Teachers' self-efficacy has been shown to affect student outcomes [4]. Subsequently [38] investigated the influence of leadership on students' performance. [38] investigated the influence of secondary school principals' leadership styles on students' performance in Nairobi, Kenya. The study findings revealed that leadership styles significantly affected students' performance. Therefore, the study recommended an investigation into teachers' perception of the influence of head teachers' leadership styles on teachers' motivation to work, which is one of the thrusts of the present study.

Contrary to the above studies that investigated the effect of leadership styles on students' performance, [39] investigated the influence of head teachers' leadership styles on motivation of teachers in public primary schools in Kenya. In

the descriptive survey study, data was collected using questionnaires from a sample selected using simple random sampling. The study found that head teachers' facilitative leadership styles positively affected teachers' motivation. However, although motivation is a psychological construct like self-efficacy, the study did not indicate what influence leadership styles would have on teachers' self-efficacy.

Therefore, while the [35,36,37,38] and [39] studies showed that leadership styles influence teachers' self-constructs such as motivation and performance, none applied itself to facilitative leadership and teachers' self-efficacy in particular. Consequently, there remained a need for a study into the effect of facilitative style of leadership on teachers' self-efficacy.

### **3. GOAL OF THE STUDY**

The purpose of this study was to determine strategies for enhancing self-efficacy among teachers in selected secondary schools of Kisumu County, Kenya.

## **4. MATERIALS AND METHODS**

### **4.1 Research Design**

The present study used the qualitative approach and within it the phenomenological design. Qualitative research is a naturalistic approach to understanding and explaining meanings people attach to phenomena and the association between thought and action [40,41]. The phenomenological design involves the study of human trends and subjective meanings with an experiential view [42,43]. The qualitative approach with the phenomenological design was used because the construct under study – strategies for enhancing teachers' self-efficacy – was a phenomenon that could not be captured quantitatively.

### **4.2 Study Participants**

The population of the study comprised 1790 secondary school teachers in public secondary schools in Kisumu County [44]. There were 143 public secondary schools in Kisumu County, of which 2 were National, 20 were County and 121 sub-county secondary schools. The qualitative sample of 12 teachers was determined using strategic sampling technique to be representative of the categories of schools and the number of teachers in each category.

Strategic sampling is choosing specific individuals to fill a sampling frame [45,46]. The qualitative sample for the present study was selected through strategic sampling, because according to [45] it is better than probabilistic sampling in qualitative research. The strength of strategic sampling is that it ensures that the sampling frame is filled and that the investigation attains theoretical saturation [45]. The qualitative sample size comprised of 12 interviewees. This number of interviewees fell between 6 and 20 that was the recommended sample size for a phenomenological study, as recommended by [45] and [47].

The adequacy of the qualitative sample was indicated by the fullness of the sampling frame and attainment of theoretical saturation [45,46]. The sampling frame was the basis for choosing interviewees, while theoretical saturation occurred when new data from new cases did not lead to new themes arising [45,46,47]. The sampling frame was filled with persons of different gender, marital status, ages, years of experience, categories of schools and job groups.

### **4.3 Research Instruments**

The current study used semi-structured interview schedule for collecting qualitative data, because of the focus and freedom it accords the researcher in data collection, gives rich data and captures inner feelings of respondents [46,48, 49]. Semi-structured interviews have open-ended questions on the topic areas that the researcher wants to cover, which defines the topic under investigation but provides opportunities for both interviewer and interviewee to discuss some topics in more detail [45].

In-depth interviewing is a form of conversation with a purpose through which knowledge about the social world is constructed in normal human interaction to explore perspectives on a phenomenon [50,51]. In-depth interviews may be prone to interviewer and interviewee biases from social desirability influence [50]. However, in this study, in-depth interviews explored detailed delicate data within personal experience for teachers to make their own meanings on the variables under study [51,52].

### **4.4 Data Collection Procedures**

Qualitative data was collected using interview schedule. However, in this study, in-depth

interviews explored detailed delicate data within personal experience for teachers to make their own meanings on the variables under study [51, 52].

The researcher personally visited the schools, met the principals, and informed them of the nature and purpose of the research. Dates for data collection were then set. Finally, on the dates agreed, the researcher visited the concerned schools to collect data from the sampled teachers. Qualitative data was collected through interview schedule and the interviews were audio-recorded using a digital voice recorder in a systematic, ethical and rigorous manner. The researcher explained to the participants the purposes and procedures of the research in the process of debriefing [53]. The respondents were then given the consent form to fill before the interview commenced.

The researcher conducted the interviews, each of which lasted between 25 – 60 minutes. The interviews were held at the participants' places of convenience such as work place and homes. The average length of the interviews was 35 minutes where the shortest interview length was 24 minutes and the longest interview length was 50 minutes.

This study used a semi-structured interview guide to ensure that all issues under study were covered in the interview process. The participants were each told the purpose of the study and how long the interview would take. Rapport was built during the time when the participants were being told the purpose of the study. The interviewees were given consent forms indicating that they were willingly participating in the study.

During the interview, verbal probes, minimal verbal prompts and non-verbal prompts were used to spur the interviewees speak freely on their experiences and opinions on the relationship between teacher demographic factors and teachers' self-efficacy [54,55]. The researcher used his experience as a counsellor to conduct the interviews by attending to the clients, providing the core conditions of empathy, congruence and acceptance and counselling skills to obtain information from the interviewees [55]. The interviews were audio-recorded using a digital voice recorder by the researcher.

### **4.5 Data Analysis**

Qualitative data was analyzed using thematic analysis, which is a method for identifying,



analyzing and reporting patterns, called themes, within data by organizing and describing the data set in rich detail [56]. Interviews from the interviewees were tape-recorded, transcribed, interpreted, themes and sub-themes emerged and coded as in [49]. Thematic analysis was performed using the five phases of [56] which were, verbatim transcription, initial coding, searching for themes, reviewing themes, defining and naming the themes.

Data analysis was conducted using the thematic analysis approach according to [56]. Thematic analysis is a method for identifying, analyzing and reporting patterns within data that minimally organizes and describes data set in rich detail to interpret the issue under study [56]. The weakness of thematic analysis, according to [56] is that it describes but does not interpret data unless it is used within a theoretical framework to anchor its analytic claims. However, thematic analysis was used in the study because it offered a thick description of the data set, generated unanticipated insights and allowed psychosocial and interpretations of data [49].

## 5. RESULTS AND DISCUSSION

The emerging themes from the respondents on strategies that may be used to enhance teachers' self-efficacy were better remuneration, improvement of teachers' working conditions, capacity-building programs and facilitative style of leadership.

### 5.1 Better Remuneration

The first strategy that teachers responded would raise their teacher self-efficacy was better remuneration. In the present study, better remuneration was taken as the salary that teachers are paid by their employer, Teachers' Service Commission. Two teachers reported that:

*I would like to emphasize motivating and appreciating the teachers, in terms of salary. Pay teachers as professionals, if salary is increased their self-efficacy will go up. Right now, we are just getting wages, like for slave labor, not salaries.*

*Remuneration of the teachers is not commensurate with what teachers do. The most important factors in teachers' self-efficacy are job group and remuneration. The teacher is not earning what is comparable to*

*other people who have undergone similar training. If remuneration were increased, it would alleviate even the complaints on job group progress.*

The respondents also felt that specific for further studies would also enhance teachers' self-efficacy. A teacher specified that salary increments on attainment of higher qualifications would enhance self-efficacy of teachers whose driving factor for working is desire for more money. For example, a teacher respondent reported that:

*TSC should appreciate courses done and hence salary increment. If teachers were paid more, some would feel more efficacious; especially for those whose driving factor is desire for more money.*

The finding of the current study, therefore, was that the salaries teachers get paid lower teachers' self-efficacy because the teachers feel the salaries are too low. This finding was similar to [18] and [19] which found that extrinsic rewards such as salary enhance the self-efficacy of employees. However, it was contrary to the finding of [17] which reported that while pay was the most important motivator of employees, its influence was nonlinear across pay levels.

### 5.2 Improvement of Working Conditions

The second strategy that the teacher respondents said would enhance their self-efficacy was improvement of working conditions for teachers. According to the teachers, improvement of teachers' working conditions involves improvement teachers' welfare programs and teaching-learning facilities. The teachers reported that improving their working conditions through the institution of welfare programs, provision of housing, quality meals, parties and trips enhance teachers' self-efficacy. For example, teachers reported that:

*Environment motivates teachers though provision of houses, every teacher is housed even teachers on teaching practice. Hence, you have to work. That is a very big motivator – yeah.*

In addition, a teacher reported that:

*The Board of Management (BoM) should provide the meals needed for the teachers. Motivate the teachers by taking them for a fun trip or party.*

The teachers also reported that teachers' self-efficacy could be enhanced by improving their working conditions through provision of teaching-learning facilities in their workstations. The respondents said that teachers' self-efficacy is lowered by lack of facilities such as library, computers and talking board would raise the teachers' self-efficacy. For instance, a teacher reported that:

*New technology through computers, talking blackboard, etc. Small schools should have libraries. Provide physical facilities required for learning.*

The current study, therefore, found that improvement of teachers' working conditions through welfare programs and provision of teaching-learning facilities could enhance teachers' self-efficacy. This was similar to the findings of [23,24,25] and [26] that had found working conditions characterized by low job strain, employee welfare programs and sufficient physical facilities and instructional resources enhanced teachers' self-efficacy.

### 5.3 Capacity Building Programs

Thirdly, the respondents reported that teachers' self-efficacy could be enhanced through the strategy of capacity-building programs involving in-service training and counselling services. In-service training would enhance the teachers' self-efficacy by increasing content mastery and equipping with new pedagogical skills. For instance, a teacher reported, "Enhance teachers' self-efficacy through further training through in-service training. In addition, another teacher added, "Enhance teachers' self-efficacy through workshops, refresher courses and content in the teachers' areas of specialization."

Furthermore, capacity-building programs, according to the teacher respondents, should also include guidance and counselling services for teachers to address issues such as bereavement, divorce and orientation of new teachers. For instance, a teacher reported, "Provide counselling workshops for recently widowed so that they do not to take their emotions to class". Moreover, on divorced teachers, another teacher reported,

*The teachers who are divorced should be counseled because they are pessimistic and bitter about life and feel "everybody feels I am a failure.*

On orientation through guidance and counselling, a teacher added that:

*There should be orientation services where newly employed teachers with low self-efficacy are encouraged that they can make it and that they need to believe in themselves.*

The finding of the current study, therefore, was that teachers' self-efficacy can be enhanced by capacity-building programs involving in-service and counselling services. This was similar to [27, 28, 29, 30, 31, 32] and [33] which had found that capacity-building programs including in-service training and workplace counselling services enhanced workers self-efficacy.

### 5.4 Facilitative Style of Leadership

The fourth strategy that the respondents reported could enhance teachers' self-efficacy was facilitative style of leadership by secondary school principals. Facilitative style of leadership is appreciative, supportive, recommending and delegating to teachers. A teacher reported on the influence of verbal appreciation and support by principals on teachers' self-efficacy that:

*Verbal appreciation by their leaders will make them work better. You are being encouraged and that makes you work even more. Intimidating heads lower teachers' self-efficacy.*

Furthermore, the teacher interviewees also felt that delegation of duties and recommendation for promotion enhances teachers' self-efficacy. For example, a teacher reported that:

*Give them responsibility such as Heads of Department as motivation. When work is actually delegated and the budget for their department and they are totally in charge their self-efficacy will rise. Recommend the teachers for promotion; delegate work and trust the teacher to do the work to raise their self-efficacy.*

The current study, consequently, found that principal's leadership styles could either raise or lower teachers' self-efficacy. Leadership of principals that appreciates teachers, delegates work and recommends teachers for promotion without being intimidating was found to raise teachers' self-efficacy. This finding was similar to [36,37,38] and [39] which found that leadership

styles affected self-efficacy and that facilitative style of leadership enhanced self-efficacy. However, the finding of the current study was contrary to the finding of [35] which reported that it was integrative leadership style led to better school outcomes.

## 6. CONCLUSIONS

The respondents felt that teachers' self-efficacy would be enhanced through better remuneration for all teachers in general and for specific teachers who had attained higher qualifications in the course of service. The present study therefore concluded that improved remuneration would lead to improved work performance among teachers because teachers' performance is influenced by self-efficacy. The current study, moreover, recommends that further study might be carried out on the relative importance of school-based and employer-based remuneration in teachers' self-efficacy.

The second strategy was improvement of teachers' working conditions by improving teachers' welfare programs and teaching-learning facilities in the schools. The present study, consequently, concluded that the improvement of teachers' working conditions by the school Board of Management would lead to better learning outcomes because students' performance is influenced by teachers' self-efficacy. However, further study might be carried out to determine the differences in teachers' self-efficacy across schools with varying levels of facilities.

The third strategy was provision of professional development programs, such as in-service training and counselling services to increase the capacity of the teachers. Therefore, the present study concluded that the Ministry of Education, Science and Technology of Kenya should institute regular programs that continuously improve teachers professionally because this would increase the educational standards in Kenya since teachers' self-efficacy influences educational standards in schools. In addition, an explorative study might be carried out to determine the capacity building needs of teachers.

The fourth strategy the teachers suggested was that of facilitative style of leadership that involves praise for work well-done, non-autocratic leadership, recommendation for promotion and effective delegation of duties to juniors.

Therefore, the present study concluded that school administrators should adopt facilitative style of leadership that assists teachers to attain their personal and professional goals because this would improve the school's mean score, which is influenced by teachers' self-efficacy. Further study, however, should be carried out to compare the influence of different leadership styles on teachers' self-efficacy.

## ETHICAL APPROVAL

All authors declare that written informed consent from the participants and research permit was obtained from the National Commission for Science, Technology and Innovation of Kenya (NACOSTI) for conducting this study.

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Bandura A. Social cognitive theory. In R. Vasta (Ed.), *Annals of Child Development, Six Theories of Child Development*. Greenwich, CT: JAI Press. 1989;6:1 – 60.
2. Page CS, Pendergraft B, Wilson J. Examining elementary teachers' sense of efficacy in three settings in the Southeast. *Journal of Inquiry & Action in Education*. 2014;5(3):31–41.
3. Bandura A. Social cognitive theory: An agentic perspective. *Annual Review of Psychology*. 2001;52:1–26.
4. Protheroe N. Teacher efficacy: What is it and does it matter? *Principal*. 2008;42–45.
5. Klassen RM, Chiu MM. Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience and job stress. *Journal of Educational Psychology*. 2010;102(3):741–756.
6. Adu EO, Tadu R, Eze I. Teachers' self-efficacy as correlates of secondary school students' academic achievement in southwestern Nigeria, *Discovery*. 2012;2(4):8 –16.
7. Bandura A. Relative efficacy of self-monitored and externally imposed reinforcement systems. *Journal of Personality and Social Psychology*. 1967;7(2):111–116.

8. Largani MSK, Ebrahimi T. The relationship between leadership style and self-efficacy level of managers. *International Journal of Business and Behavioral Sciences*. 2013; 3(3):10–14.
9. Salanova M, Lorente L, Chambel MJ, Martinez IM. Linking transformational leadership to nurses' extra-role performance: The mediating role of self-efficacy and work engagement. *Journal of Advanced Nursing*. 2011;67(10):2256–2266.
10. Boston University School of Public Health (BUSPH, 2013). The Social Cognitive Theory. Behavioral Change Models. (Retrieved on 3<sup>rd</sup> January 2015). Available:<http://sphweb.bumc.bu.edu/otlt/M-PH-Modules/SB/SB721-Models/SB721-Models5.html>
11. Odongo G. Teacher perceptions of their readiness to educate children with sensory disabilities in Kisumu local education authority-Kenya. Albuquerque: American Council on Rural Special Education (ACRES) Conference; 2011.
12. Oginga E, Muola J, Mwanja J. The factors influencing the teaching of HIV/AIDS education in public primary schools in Kisumu East district, Kenya. *International Journal of Education and Research*. 2014;2(1):1–14.
13. Obura C, Ajowi J. Students' perceptions of careers: The influence of academic performance and self-efficacy in Kisumu Municipality. *Modern Social Science Journal*. 2012;1(1):56–93.
14. County Director of Education (CDE). Kisumu County Teachers Records. Ministry of Education, Kisumu County Education Office. Kisumu; 2016.
15. Bandura A. The evolution of social cognitive theory. In Smith KG, Hitt MA. (Eds). *Great Minds in management* (9–35). Oxford: Oxford Univ. Press; 2005.
16. Bandura A. Perceived self-efficacy in cognitive development and functioning. *Educational psychology*. 1993;28(2):117–148.
17. Rynes SL, Gerhart B, Minette KA. The importance of pay in employee motivation: Discrepancies between what people say and what they do. *Human Resource Management*. 2004;43(4):381–394.
18. Hameed Z, Maqbool A, Athar MR, Ijaz MS, Hassan E. How to increase employee performance: Investigating the impact of incentive motivators and organization-based self-esteem in a Pakistani perspective. *Middle-East Journal of Scientific Research*. 2013;14(5):696–702.
19. Malik ARM, Butt AN, Choi JN. Rewards and employee creative performance: Moderating effects of creative self-efficacy, reward importance, and locus of control. *Journal of Organizational Behavior*. 2015;36(1):59–74.
20. Tzur KS, Ganzach Y, Pazy A. On the positive and negative effects of self-efficacy on performance: Reward as a moderator. *Human Performance*. 2016;29(5):362–377.
21. Britton J, Propper C. Teacher pay and school productivity: Exploiting wage regulation. *Journal of Public Economics*. 2016;133:75–89.
22. Hu SH, Yu YM, Chang WY, Lin YK. Social support and factors associated with self-efficacy among acute-care nurse practitioners. *Journal of Clinical Nursing*; 2017. (Retrieved on December 14, 2017) Available:<https://www.ncbi.nlm.nih.gov/pubmed/29076613>
23. Schwarzer R, Hallum S. Perceived teacher self-efficacy as a predictor of job stress and burnout: Mediation analyses. *Applied Psychology: An International Review*, 2008; 57:152–171.
24. Orodho JA, Waweru PN, Ndichu M, Nthinguri R. Basic education in Kenya: Focus on strategies applied to cope with school-based challenges inhibiting effective implementation of curriculum. *International Journal of Education and Research*. 2013;1(11):1–20.
25. Hassan MA. Employee welfare programmes: Panacea towards improving labour productivity in the service sector In Nigeria. *Mediterranean Journal of Social Sciences*. 2014;5(10):78–81.

26. Kuria PN. The effects of employee welfare programmes on job satisfaction within the flower industry in Kenya. Institutional Repository. Kenyatta University; 2012.
27. Hughes R, Kinder A. Guidelines for counselling in the workplace. British Association for Counselling and Psychotherapy; 2007. (Retrieved on 4<sup>th</sup> January 2015) Available:[http://www.bacpworkplace.org.uk/acw\\_guidelines\\_web.pdf](http://www.bacpworkplace.org.uk/acw_guidelines_web.pdf)
28. Schunk DH, Zimmerman BJ. Influencing children's self-efficacy and self-regulation of reading and writing through modeling. *Reading and Writing Quarterly*. 2007;23:7–25.
29. Berghe W. The impact of in-service training activities supported by Comenius and Grundtvig. National Agencies for the Lifelong Learning Programme in Belgium; 2010. (Retrieved on 4<sup>th</sup> January 2015) Available:<http://www.epos-vlaanderen.be/Uploads/dbsAttachedFiles/IST-Survey-Final-draft.pdf>
30. Bluestone J, Johnson P, Fullerton J, Carr C, Alderman J, BonTempo J. Effective in-service training design and delivery: evidence from an integrative literature review. *Human Resources for Health*. 2013;11(51):1–26.
31. Shahmohammadi N. The effect of in-service training courses on the teacher's attitude and performance. *International Letters of Social and Humanistic Sciences*. 2014;19:183-191.
32. Bunyi G, Wangia J, Magoma C, Limboro C. Teacher preparation and continuing professional development in Kenya: Learning to teach early reading and Mathematics. Global Monitoring Report Team, UNESCO; 2013.
33. Mshila RM. Effects of in-service training on the performance of secondary school teachers in Kiambu West District. Institutional Repository. Kenyatta University; 2012.
34. Bowen R, McDonough M. The Role of Facilitative Leadership in Project Management; 2011. (Retrieved on 4<sup>th</sup> January 2015) Available:<http://www.brighthubpm.com/resource-management/113366-the-role-of-facilitative-leadership-in-project-management/>
35. Al-Safran E, Brown D, Wiseman A. The effect of principal's leadership style on school environment and outcome. *Research in Higher Education Journal*. 2013;1(3):16–66.
36. Hardman BK. Teacher's perception of their principal's leadership style and the effects on student achievement in improving and non-improving schools. Graduate Theses and Dissertations. University of South Florida; 2011.
37. Jankingthong K, Rurkkhum S. Factors affecting job performance: A review of literature. *Silpakorn University Journal of Social Sciences, Humanities and Arts*. 2012;12(2):115–127.
38. Nkirote J. Influence of secondary school principals' leadership styles on students' performance in Kenya Certificate of Secondary Education in Nairobi County, Kenya. Digital Repository. University of Nairobi; 2013.
39. Tabu FG. Effects of the headteachers' leadership styles on motivation of teachers in public primary schools in Nairobi County, Kenya. Thesis. Department of Educational Administration and Planning, University of Nairobi; 2012.
40. Ritchie J. The applications of qualitative methods to social research. In Ritchie J, Lewis J. (Eds). *Qualitative research practice: A guide for social science students and researchers*. London: Sage publications; 2003.
41. Snape D, Spencer L. The foundations of qualitative research. In Ritchie J, Lewis J. (Eds). *Qualitative research practice: A guide for social science students and researchers*. London: Sage publications; 2003.
42. Cipani E. *Practical Research Methods for Educators Becoming an evidence based practitioner*. New York: Springer Publishing Company, LLC; 2009.
43. Morrissey G, Higgs J. Phenomenological research and adolescent female sexuality: Discoveries and applications. *The Qualitative Report*. 2006;11(1):161–181.

44. Teachers' Service Commission. Teachers' Service Commission of Kenya Online Services: Listing of Schools – Kisumu County; 2010.  
(Retrieved on May 18, 2014)  
Available:[www.teachersonline.go.ke/masterbasic.aspx](http://www.teachersonline.go.ke/masterbasic.aspx)
45. Hancock B, Windridge K, Ockleford E. An Introduction to qualitative research. The National Institute for Health Research (NIHR) Research Design Service (RDS) East Midlands / Yorkshire and the Humber; 2007. (Retrieved on 4<sup>th</sup> June)  
Available:[http://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/5\\_Introduction-to-qualitative-research-2009.pdf](http://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/5_Introduction-to-qualitative-research-2009.pdf)
46. Turner AG. Sampling Frames and Master Samples; 2003.  
(Retrieved on May 11, 2014)  
Available:[http://unstats.un.org/unsd/demographic/meetings/egm/sampling\\_1203/docs/no\\_3.pdf](http://unstats.un.org/unsd/demographic/meetings/egm/sampling_1203/docs/no_3.pdf)
47. Mason M. Sample size and saturation in PhD studies using qualitative interviews. Forum Qualitative Sozialforschung / Forum: Qualitative Social Research. 2010;11(3):1–13.
48. McKenzie L, Hannan A. What are the advantages and disadvantages of interviews? Interviews in Education Research; 2007.  
(Retrieved on 10<sup>th</sup> October, 2013)  
Available:[www.edu.plymouth.ac.uk/resined/interviews/inthome.htm#A.Introduction](http://www.edu.plymouth.ac.uk/resined/interviews/inthome.htm#A.Introduction)
49. Raburu PA. Women academics' careers in Kenya. Thesis. Lancaster University; 2011.
50. Boyce, C, Neale P. Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input. Pathfinder International Tool Series: Monitoring and Evaluation – 2. Watertown: Pathfinder International; 2006.
51. Legard R, Keegan J, Ward K. In-depth interviews. In Ritchie, J. & Lewis, J. (Eds). Qualitative research practice: A guide for social science students and researchers. London: Sage publications; 2003.
52. Lewis F. Design Issues. In Ritchie J, Lewis J. (Eds), Qualitative research practice: A guide for social science researchers. London: Sage publications; 2003.
53. Taylor SE, Peplau LA, Sears DO. Social Psychology. Upper Saddle River: Pearson Education, Inc; 2006.
54. Egan G. The skilled helper: A problem-management and opportunity-development approach to helping. Belmont: Brooks/Cole, Cengage Learning; 2010.
55. Nelson-Jones R. Practical counselling and helping skills text and activities for the lifeskills counselling model, 5<sup>th</sup> edition. London: SAGE Publications Ltd; 2005.
56. Braun V, Clarke V. Using thematic analysis in psychology. Qualitative Research in Psychology. 2006;3(2):77–101.

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