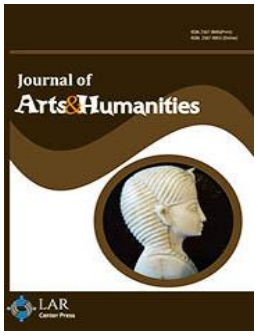

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Assessment of Self-Efficacy on Learners' Academic Performance in Secondary Schools in Kirinyaga and Murang'a Counties, Kenya

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ABSTRACT

Self-efficacy is considered a major variable influencing learners' academic performance. Its influence on academic performance is not clearly documented especially in Kirinyaga and Murang'a counties in Kenya. School rankings from the study region indicated differences in the academic performance of boys and girls during the 2012-2017 period. Therefore, there was need to establish the influence of self-efficacy in the apparent differences on the academic performance between the boys and girls in the two counties. The study was guided by 3 objectives, to; establish the status of learners' self-efficacy, determine the relationship between learners' self-efficacy and academic performance in secondary schools, and correlate learners' self-efficacy by gender and academic performance in secondary schools in Murang'a and Kirinyaga counties in Kenya. The study adopted correlational research design. The target population was 5879 comprising of all the form three students in the extra-county and national schools in Murang'a and Kirinyaga counties. A sample of 412 respondents filled questionnaires. Data was analysed using the descriptive and inferential statistics with the aid of SPSS version 20.0. The findings indicated a strong relationship between self-efficacy and academic performance. The overall mean for self-efficacy was 71.36%, highest among males with a mean of $\bar{x}$=71.89% and $\bar{x}$=70.95% for the females. Kirinyaga county learners were more efficacious with a mean of $\bar{x}$=77.58% compared to Murang'a county's mean of $\bar{x}$=67.06%. Findings concluded there was need to strengthen the inculcation of self-efficacy in the personality development of learners through structured exposure to role models and experiential learning strategies. The study recommended enhancement of teachers with pedagogical skills, which are deemed instrumental in the shaping and development of self-efficacy in learners, during preservice and continuous professional development.

Keywords: Shaping behavior, pedagogy, personality development, role model, self-efficacy.

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1. Introduction

Self- efficacy is one of the fundamental factors that significantly influences the academic performance of learners in education. Ormrod, Anderman & Anderman (2017) define self-efficacy as the personal view of one's ability to initiate and take tasks to completion. Bandura (2004) has defined self-efficacy as one's belief in ability to succeed in specific situations or accomplish a task. One's sense of self-efficacy can play a major role in how one approaches goals, tasks, and challenges. Self-efficacy, or confidence as it is commonly known, is one of the most enabling psychology models to have been adopted into positive psychology. It is the optimistic self-belief in our competence or chances of successfully accomplishing a task and producing a favourable outcome.

Self-efficacy is certainly worth having because as Henry Ford famously put it, whether you believe you can or you can't, you are right (Bandura, 1997). Gandhi cited in Bandura (1997) perfectly understood the pivotal role that self-belief plays in peoples' lives. He stated that:

'Your beliefs become your thoughts. Your thoughts become your words. Your words become your actions. Your actions become your habits. Your habits become your values. Your values become your destiny.'

The influence of self-efficacy in the academic performance of learners is not clearly established and documented especially in Kirinyaga and Murang'a counties in Kenya. Self-efficacy has increasingly attracted significant attention in research in education. Available literature indicates self-efficacy as one of the strongest predictors of learners' academic performance (Tenaw, 2013). The Commonwealth Secretariat (2006) points out that there are many difficulties facing academic performance of secondary school students which if not addressed could disadvantage the students throughout their lives. The increased emphasis laid on academic performance has made schools to keep re-inventing strategies anticipating good academic outcomes every time. However, the situation has never improved to acceptable levels owing to the fact that the fundamental influence played by the self-efficacy of learners have not been satisfactorily addressed.

The shaping of learners' self-efficacy is construed as a critical intervention in nurturing students' ability to strive for excellence in academic performance. The process of shaping the self-efficacy of learners is a collaborative effort involving the teachers during the classroom instructional processes and counselling activities. The shaping of self-efficacy which is an aspect of learners' personality development takes place spontaneously in every available opportunity where behaviour patterns of individuals are moulded. The shaping of self-efficacy in learners is considerably executed through exposure to experiential learning and conditioning processes especially by significant others. The strategy of exposure to role models and significant others, during mentorship by resource persons is reported to be appropriate and effective technique of behaviour modification and shaping. However, the lasting impression that produces real time results is that which stimulates intrinsic inspiration. Any assistance availed by significant others should aim at making the students belief more in their ability and encourage behaviour that propel learners to attain the desired goals by themselves (Bandura, 2004). This implies that the process of shaping self-efficacy should involve enabling learners to internalize and integrate it as part of their holistic personality development.

According to the self-efficacy theory, learners acquire self-efficacy from five main sources which include the mastery experiences, vicarious experiences, verbal persuasion and physiological and emotional adjustments, and imaginal experiences (Hendricks, 2015). Mastery experiences involve learners' reference to the perceived accomplishments in past academic activities in the teaching-learning process. Mastery experiences increases when learners recount series of success achievements in their past academic endeavours. Mastery experiences can be enhanced in the classroom when the teacher provides learners with opportunities to understand concepts with clarity and presenting information in demonstrable forms. Good outcomes substantially stimulate satisfaction and fulfilment and motivates learners' academic engagement. Mastery experiences are considered the most effective ingredients in boosting self-efficacy (Tenaw, 2013; Tiyuri, Saberi, Shahrestanaki, Batyat & Salehiniya, 2018). The affirmation of learners' basic achievements, no matter how small they may be, raises their mastery experiences. Celebrating such achievements stimulates positive feelings and confidence in learners causing increased desire to pursue more academic tasks, which constitutes self-efficacy.

Deliberate activities can be organized to boost mastery experiences in students such as allowing class discussions, giving instant positive feedback and encouraging academic club activities. Academic contests, symposia and coaching programs could also enhance mastery of subject matter (Tiyuri, et al, 2018). Psychologists argue that due to students learning how to learn, learners who perform a task repeatedly master the art of doing it spontaneously well with a lot of ease. Repetition of an activity together with its attendant successful outcome builds confidence in academic achievements. Rehearsal in an activity makes it easier to perform well in the future especially when it has to do with examinations which arises from the mastery experience. Mastery experience is evidenced by tangible and quantifiable past favourable outcomes. The mastery experience gets better with positive accomplishment of a task after another, which boosts the self-belief and self-efficacy of the performer.

Vicarious experiences refer to the opinion formed by an individual after witnessing significant others succeed or fail at performing the tasks (Tiyuri, et al, 2018). Seeing is believing, as it is said, which makes learners to form favourable opinions regarding accomplishment of tasks which they have observed other people execute them with success. In the development of vicarious experiences, the strategy of demonstration can be employed where an individual who has mastered the task, displays the performance with ease. The showcase should reveal the sense of pride and enjoyment that goes with the accomplishment. It should aim at displaying the ease of doing a task and demystifying any misconceptions and fears associated with such tasks. This should encourage learners to want to do similar tasks too. Witnessing someone succeed inspires one to fathom that success is attainable causing the 'aha' effect in the learner. Such an outcome renews learners' motivation to begin and complete similar tasks in future (Tenaw, 2013). Vicarious experiences hence help to build confidence and motivation of learners since they realize that they are being called upon to walk a path that others have walked successfully before them.

Vicarious experiences require models in the academic arena that are efficacious and admirable to students. Such models should be availed to demonstrate joy that comes with accomplishment in academic endeavours. The learners see and engage in similar behaviours and activities. Accomplishments motivate patterns of competence in some perceived difficult tasks such as the study habits and understanding difficult concepts. The secret lies in raising the confidence of potential ability in learners when they witness some other people accomplish similar or even more difficult tasks during apprenticeship. Classroom situations and other instructional opportunities can best be adopted for this modelling when teachers and fast learners inspire the rest of the students to press on to the desired achievement.

Verbal persuasion is considered successful when some significant others use the word of mouth to convince students who may be doubting their capability in accomplishing a given task. The voices, opinions and views expressed by significant others, provide powerful ingredients for the development and shaping of self-efficacy. Teachers can be very instrumental in this context by helping learners to listen to positive opinions regarding their capability, especially when communicated with empathy. The verbal persuasion may come in the form of success stories or persistently goading learners to attempt and pursue tasks to completion. Verbal persuasion may focus on identified talents, potentials and capabilities that are notable in the learners. The strategy of verbal persuasion aims at inspiring the desire in learners to want to fulfil the people's prophecy (Ackerman, 2018). Learners who constantly hear messages of hope from significant others are more likely to achieve higher self-efficacy than those who hear messages of despair and condemnation.

The physiological and emotional adjustments refer to peoples' feelings and their body reactions which occur when an individual confronts a task. The individual may perceive a task as either easy or difficult, which causes feelings of happiness or anxiety (Tenaw, 2013). Psychologists explain that fear, anxiety and worry, or confidence and enthusiasm that are brought about by reactions and perceptions to a task may evoke the approach or avoidance feelings. The body reaction determines the subsequent progress and energy involved in the engagement to the task (Becker & Luther, 2012). This physiological and emotional state influences how often the learner approaches or avoids the academic tasks. The outcome is the stimulation of the drive to engage in and pursue the activity to completion. The physiological and emotional adjustments rely on the 'here and now' state of the mind in maintaining confidence or vulnerability of the performer.

The last source is the imaginal experiences. Psychologist James Maddux cited in Bandura 1997) has suggested a fifth route to self-efficacy through "imaginal experiences". The imaginal experiences refer to the art of visualising oneself as behaving effectively or successfully in a given situation. The personal visualization stimulates a sense of confidence and competence especially when the self-concept acquired is positive. This greatly influences the development of self-efficacy and self-worth.

According to Artino (2012), people with similar capability, knowledge, skills and resources may exhibit differences in their achievements as a result of their variations in self-efficacy. Self-efficacy influences the learner's choice of interest, goals, effort, persistence, commitment and resilience. The small differences eventually cause a big difference in the quality of outcomes. It therefore calls for teachers to not only teach, but also build the accompanying confidence in learners during the content delivery. The eventual shaping of learners' self-efficacy should motivate them to remain persistent towards successful completion of academic tasks. The practice of equating academic success to passing examinations at the expense of holistic shaping of personality learners, has caused real havoc and brought about a paradigm shift in education in Kenya which is unacceptable. In Kenya, there are robust strategies that have been devised to enable production of excellent examination results. These strategies are ever being improved upon such as use of token economies, behaviour contracts and other extrinsic motivation packages pegged on the individual learner and teachers' performance. These strategies focus only on academic performance and greatly ignores holistic development of learners which compromises the pursuit of the goal of holistic education (Basome, Nyakato, Koskey, Wampande, Mbuti, Magaleta & Allida, 2017). This study was informed by the educational philosophy that emphasize that effective education is one that empowers the learner with holistic education and psychosocial competence that is critical for productive engagement in society

Self-efficacy falls within the psychological needs. The self-efficacy needs are easily ignored among learners even in the bounty of material wealth. This is because, unlike other survival needs, psychological needs are not life-threatening which makes them to be easily overlooked. Psychological needs when satisfied promotes the sense of belonging, self-worth and curiosity. They also enhance creativity, competence, self-expression, autonomy, inspiration, purpose, beauty and celebration which Maslow called the growth enablers (Morris & Maisto, 2016). Mwaura (2010) in his study emphasized that the major factors impacting on learners' academic performance emanate from home, school and personal predisposition. Tenaw, (2013) and Ochieng (2015) reported conclusively that male students have greater academic efficacy in mathematics and science subjects than the female students. This study desired to find out whether male students are more efficacious in general compared to the females. The limited documentation on the self-efficacy in secondary school students and its influence on academic performance especially along the gender lines in Kenya and particularly in Murang'a and Kirinyaga Counties motivated the study.

1.1 Statement of the problem

The influence of self-efficacy in the academic performance of learners is not clearly established and documented especially in Kirinyaga and Murang'a counties in Kenya. From the study region, it was noted from school rankings that there were differences in academic performance between the boys and girls during the 2012 -2017 period. There was therefore the need to establish the influence of self-efficacy in the apparent differences in the academic performance between the boys and girls in the two counties. Psychologists explain that there exists a relationship between self-efficacy and academic performance of students. Students in Kirinyaga County have consistently performed well academically in Kenya Certificate of Secondary Education (KCSE) for the last 6 years (2012-2017). Murang'a County on the other hand, lags way behind Kirinyaga County in the KCSE performance, despite the two counties being immediate neighbours. Owing to the emphasis laid on the importance of self-efficacy in predicting academic performance, there was therefore the need to examine the influence of self-efficacy on learners' academic performance from both the male and female students from the two counties.

1.2 Objectives

The study was guided by the following objectives to;

i. Establish the status of self-efficacy of learners in Murang'a and Kirinyaga Counties.

ii. Determine the relationship between learners' self-efficacy and academic performance in secondary schools in Murang'a and Kirinyaga counties in Kenya.

iii. Compare the self-efficacy by learner's gender on their academic performance in secondary schools in Murang'a and Kirinyaga counties in Kenya.

2. Literature review

Studies in Kenya show that boys and girls perform differently in school. Baru (2012) in a comparative study in Murang'a County found that boys were performing better than girls in academics especially in KCPE. However, the difference was noted to have narrowed at the form three level in secondary schools. A study by Mwangi (2016) in Nyeri County concluded that negative attitudes affected the boys' productivity in school. The major factor attributed to the difference was negative attitudes towards education. Kaguma (2016) in Kirinyaga County identified several factors thwarting the academic performance of girls. The factors identified included poverty, early pregnancies, indiscipline, lack of guidance and counselling, lack of role models and illicit brews. Other studies show that academic performance depend on learners' intelligence, availability of teaching-learning resources, conduciveness of learning environment and home-related factors (Mwaura, 2010). However, the personality-related factors behind the academic endeavours have received little attention. Most of the studies exploring the factors influencing secondary school students' academic performance focus more on physiological needs (Otiati, 2013; Abubakar, 2013). Korir and Kipkemboi (2014) for instance attributes poor performance to shortage of facilities and resources such as teachers, textbooks, classrooms and laboratory. However, strategies to address the physiological needs have not addressed the nagging problem of academic underperformance.

Self-efficacy is considered a major personality attribute associated with behavioural patterns within which academic performance blossom (Troncone, Drammis & Labella, 2014). According to Ormrod, Anderman & Anderman (2017) self-efficacy refers to a personal view of one's ability to initiate and take tasks to completion. Self-efficacy is considered not just as an ordinary trait that is task-specific and varies across situations, but an instrumental personality characteristic that pervades every facet of an individual's performance. In this regard learners' academic performance can be regarded as a manifestation of their self-efficacy. The individual differences have been observed in academic performance amongst learners. This difference can be attributed to the differing amount of academic efficacy which students exude in the teaching-learning process (Betoret, Rosello & Artigo, 2017). Self-efficacy stimulates differing amount of fortitude invested by learners in the teaching-learning process. It promotes learners' psychological resilience which fosters management of crisis and recovery from adversity (He, Cao, Feng, Guan, & Peng, 2013). These are characteristics that define well performing students.

Self-efficacy is influenced by both inherent and environmental factors affecting learners' motivation and endurance as postulated by Social Cognitive theory (Bandura, 2004; LaMorte, 2018). The theory predicts a positive relationship between self-efficacy and academic performance (Dybowski, Sehner & Harendza, 2017). Human activity such as studying can be motivated through increased reinforcement, gaining control and confidence. This constitutes self-efficacy.

Learners are more likely to commit themselves in what they believe they are capable of accomplishing successfully (Ormrod, Anderman & Anderman, 2017). More efficacious learners are more likely to set high standard goals, persist more when confronted with difficulties when handling such tasks (Ochieng, 2015). The learners confront demanding tasks with confidence as they strive for success. Students with low self-efficacy will possibly set easy targets, put on little effort and give up quickly if faced with challenges in the endeavours. Such students will see huge tasks as threats and give up quickly in case they meet substantial hardships. The learners' perception explains why efficacious learners are more likely to do well academically. They engage more cognitive processes such as paying attention, forming mental pictures, focusing, interpreting, rehearsing and retrieving ((Ormrod, Anderman & Anderman, 2017).

3. Methodology

The study adopted quantitative correlational design which used questionnaires to collect data from a large representative sample. The study was carried out in Murang'a and Kirinyaga counties in Kenya. The target population for the study was 5879 comprising of all the form three students in public secondary schools in Murang'a and Kirinyaga counties in national and extra-county schools. The study adopted the stratified random sampling techniques to select a representative sample. The sample was drawn to represent counties, school categories and gender as shown in the table 1 below, as well as the 3 cadres of academic performance.

Table 1.

Sample size

	Target population	Target schools		Sampled schools		Sample size		Grand sample
		national	Extra-county	national	Extra-county	Male	Female	
Murang'a	3930	2	13	2	4	86	156	183
Kirinyaga	1949	2	9	2	3	79	73	229
Total	5879	4	22	4	7	183	229	412

The only four national schools in the region were purposively sampled while the Gays sampling criteria of 10-30% where the upper limit of 30% was used to sample 7 extra-county schools from 22. Yamane's formula was used to sample out 412 students from the population of 5879. Data was collected using a questionnaire that contained a Likert scale with 10 items. The items were spread over a 5-point Likert scale to guide respondents into precisely rating their perceived self-efficacy. A pilot study was conducted to ascertain the reliability of the research tool where the Cronbach's reliability test was 0.808 which was higher than the 0.7 recommended by Kerlinger (1976) as a measure of acceptance. Data was analysed using both the descriptive and inferential statistics with the aid of the scientific package for social sciences version SPSS 20.0. Self-efficacy was classified into 3 levels; low, moderate and high. The scores below 33.3% were classified low, between 33.3 and 66.7% moderate while the scores above 66.7% were classified high. The results were analysed and presented in accordance with the stated objectives.

4. Results and discussion

The study had 100% questionnaire return rate. The return rate was achieved because the researcher personally administered the tools. Data was analysed thematically as per the stated objectives that guided the study.

4.1 Status of self-efficacy of learners in Kirinyaga and Murang'a Counties

The first objective of the study was to establish the status of self-efficacy of learners from the national and extra-county schools in Murang'a and Kirinyaga Counties. Results indicated that the students rated their perceived self-efficacy highly at 71.36%. This means that the students in national and extra-county schools are highly confident in initiating and completing academic activities. This differed with the findings by Ochieng' (2015) who found that the students' self-efficacy was average; neither high nor low, but moderate. The difference however can be attributed to characteristics of the target population. This study sampled the population of students from the national and extra-county schools only, unlike the study by Ochieng' which randomly selected schools from across all the categories in Kenya. This could suggest that students in the categories lower than extra-county have students with low self-efficacy.

The perceived self-efficacy of students in Kirinyaga County was higher with a mean of $\bar{x}$=77.58% compared to Murang'a county students with $\bar{x}$=67.06%. The Kirinyaga county students were therefore more efficacious than those of Murang'a county with a statistically significant difference. This suggests that students enrolled in national or extra-county schools in Kirinyaga County acquire self-efficacy more than those enrolled in Murang'a county schools in similar school categories.

4.2 Influence of self-efficacy on academic performance

The second objective examined the influence of learners' self-efficacy on academic performance in secondary schools in Murang'a and Kirinyaga counties in Kenya. In order to address the objective, a correlation analysis between students' perceived self-efficacy and academic performance indicated that there exists a strong relationship between them. The calculated Pearson's coefficient of correlation r=0.532, with p-value=0.000. This means that self-efficacy of the students from the national and extra-county schools in Murang'a and Kirinyaga County have a strong positive correlation with academic performance. It therefore offers a good model for predicting academic performance. These findings concurred with Artino (2012), Shkullaku (2013), Tiyuri et al (2018) and Tenaw (2013) whose findings showed that a strong positive correlation existed between students' efficacy and academic performance. Consequently, this suggested that high self-efficacy corresponds with better academic performance. It also suggests that the well performing students are highly efficacious. They are better placed in engaging in endeavours that promote academic performance than those with low self-efficacy.

Figure 1 below indicate a positive correlation between self-efficacy and cadres of academic performance.

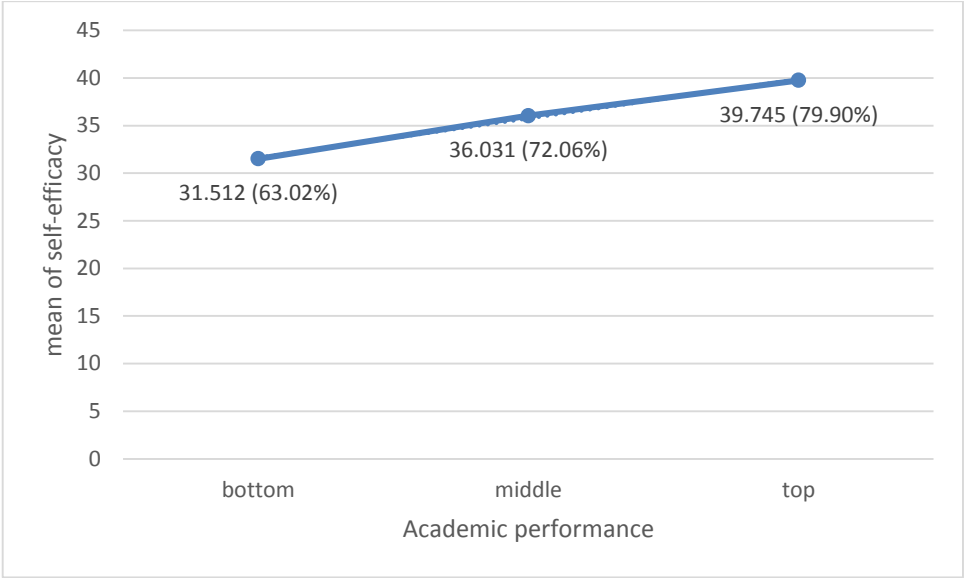

Figure 1. Students' perceived self-efficacy and academic performance

Figure 1 shows that self-efficacy increased linearly as the cadres of academic performance increased. This suggested the students' self-efficacy is proportional to the academic performance. The students in Kirinyaga County by virtue of scoring significantly higher in self-efficacy, are most likely doing better academically than those of Murang'a County. For the same reason, the students in national schools are more likely to be performing better academically than their counterparts in extra-county. The overall coefficient of determination r2=0.282 between self-efficacy and academic performance of students in Murang'a and Kirinyaga counties. This means that 28.2% of the students' academic performance can be explained in terms of self-efficacy. Further multiple regression analysis of the self-efficacy between the counties indicated that the coefficient of determination in Murang'a and Kirinyaga are r2=0.396 and r2=0.187 respectively. This suggests that self-efficacy accounted more of students' academic performance in Murang'a than Kirinyaga county with 39.6% and 18.7% respectively. This means that academic performance is more sensitive to self-efficacy in low efficacious students. The highly performing students experience little influence from self-efficacy on academic performance. Consequently, self-efficacy accounts more of performance in poorly performing students. Enhancing efficacy in the poorly performing students therefore could reduce its effect on academic performance.

The findings suggest that since students in Kirinyaga County are more efficacious according to the results, they could be doing better academically than those in Murang'a County. The academic performance in Murang'a county students can probably be through learners' self-efficacy. The percentage of self-efficacy that accounts for academic performance could be suggesting the amount of deprivation that the students have suffered from low self-efficacy in Murang'a and Kirinyaga counties.

According to Maslow's hierarchy of needs, the unmet needs take precedence in the learners' life, at the expense of other needs such as need for academic achievement (Tahira 2014; Deckers, 2018). The findings of the study hence provide the empirical evidence that psychological needs as represented by the self-efficacy

4.3 Comparison of self-efficacy between male and female students

The third objective compared the results of self-efficacy by gender of learners on their academic performance in secondary schools in Murang'a and Kirinyaga counties in Kenya. The results indicated that the mean of self-efficacy in male and female students was $\bar{x}$=71.89% and $\bar{x}$=70.95% respectively with p-value=0.466 at 5 % level of significance as shown in table 2 below. This shows that male students are more efficacious than their female counterparts. However, the difference is not statistically significant. The findings are in agreement with those by Shkullaku (2013) who observed that the male students were higher in self-efficacy than their female counterparts. Shkullaku's (2013) however noted that the difference in self-efficacy between male and female students was statistically significant unlike in this study where the difference is not significant. It also partly differed with Tenaw's (2013), which found that girls were higher than boys in self-efficacy, but agrees that the difference was not significant.

Table 2.
Analysis of self-efficacy of male and female students

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Efficacy	Male	178	35.9438	6.65257	.49863
	Female	225	35.4756	6.18687	.41246

A regression analysis between self-efficacy and gender indicated that r=0.036 and r2=0.001 with p-value=0.466 at 5% level of significance as shown in the table 3 below. This showed that there was a weak correlation between students' self-efficacy and gender. Gender cannot be used to predict self-efficacy of students in national and extra-county in Murang'a and Kirinyaga counties. Only 0.1% of self-efficacy that can be accounted for in terms of gender. These results suggest that the difference in efficacy between male and female student may actually not be existing. However, the patriarchal system expects that males should always be better than the females. This could have influenced the students' rating of their self-efficacy.

Table 3.
Regression analysis between gender and self-efficacy

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics R Square Change	F Change	df1	df2	Sig. F Change
.036[a]	.001	-.001	6.39661	.001	.533	1	401	.466

a. Predictors: (Constant), Gender

Analysis of students' self-efficacy by gender indicated similar trends. Self-efficacy was greatest in the top cadre in both male and female, and lowest in the bottom cadres as shown in Figure 2 below. While the mean of top and middle cadres were almost equal in both male and female students, it was different in bottom cadre. The self-efficacy of female students was lower than their male counterparts as shown in the graph. This suggests that girls suffer more from low self-efficacy than boys in the schools.

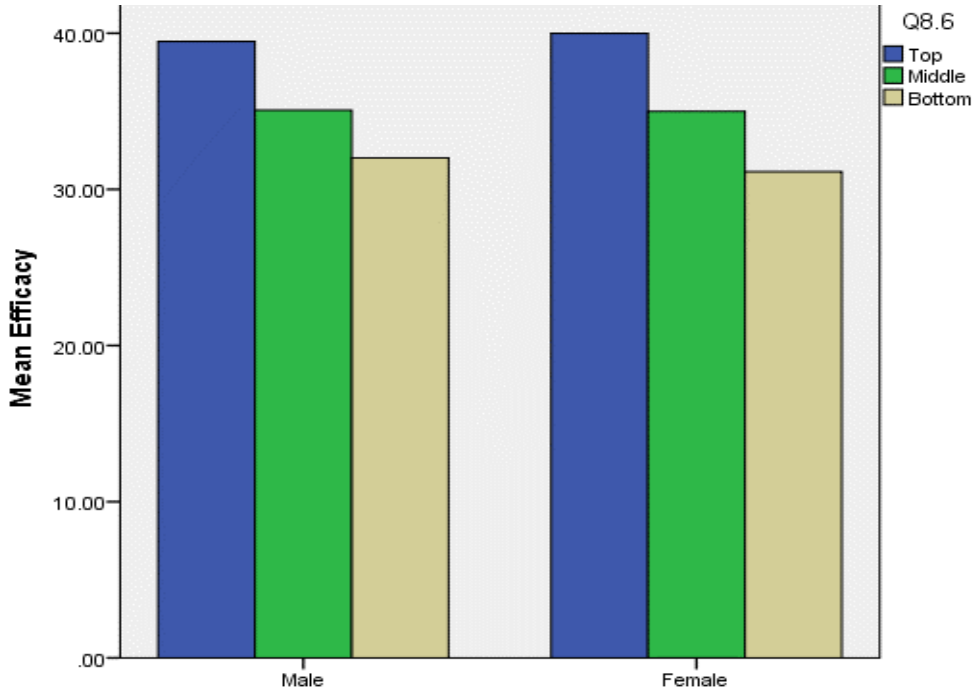

Figure 2. Students' self-efficacy by gender and academic performance

From the Figure 2, regression analysis of gender on academic performance showed that coefficient of regression r=0.055 and coefficient of determination r2=0.03, with p-value=0.265 at 5% level of significance. This means that gender cannot be used as a significant predictor of academic performance. It is only 3.0% of academic performance that can be explained in terms of gender. The small difference in self-efficacy between male and female students could be attributed to the society's expectations in the patriarchal system where men are expected to be better than women in all aspects.

Table 4.

Regression analysis of gender and academic performance

R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
.055[a]	.003	.001	.820	.003	1.244	1	410	.265

a. Predictors: (Constant), Gender

4.4 Self-efficacy and school category

The study further examined the relationship between self-efficacy and school category. The t-test on self-efficacy between the national and extra-county school students gave mean of $\bar{x}$=75.11% and $\bar{x}$=68.95% respectively. The calculated Pearson's coefficient of correlation r=0.236, p-value=0.000 at 5% level of significance. This means that there is a significant correlation between self-efficacy and school category. The placement of students in the school category mainly depend on the learners' entry behaviour, which means that students with higher entry behaviour secure a chance in national schools. The best of the remaining students join extra-county schools in the order of merit and their preference (Makori, Chekwarwa, Jepkenei & Jacob, 2015). The self-efficacy of students was noted to increase with the school category. The entry behaviour of the students may not have differed much between national and extra-county students.

This is because they are adjacent in categories, but the differing self-efficacy could have caused the difference in academic outcomes since self-efficacy predicts academic outcomes. The study showed that self-efficacy of students was proportional to school categories, meaning that students in the lower school categories could be suffering more from low self-efficacy. The students who get enrolled in national or extra-county schools have their efficacy rising higher than those admitted in other lower categories. This also means that efficacy drops proportionally to school category. Consequently, enrolling a student in the higher category of school raises their self-efficacy.

The results of the analysis of the relationship between self-efficacy, the counties and school categories are presented in Figure 3. The results indicated that students in national schools were more efficacious than those in extra-county schools in both Murang'a and Kirinyaga counties. The self-efficacy of students in Kirinyaga County was higher than that of students in Murang'a County. Since self-efficacy predicted academic performance, the higher self-efficacy in national schools than extra-county schools suggested that national school students could doing better academically than the students in extra-county schools in Murang'a and Kirinyaga counties.

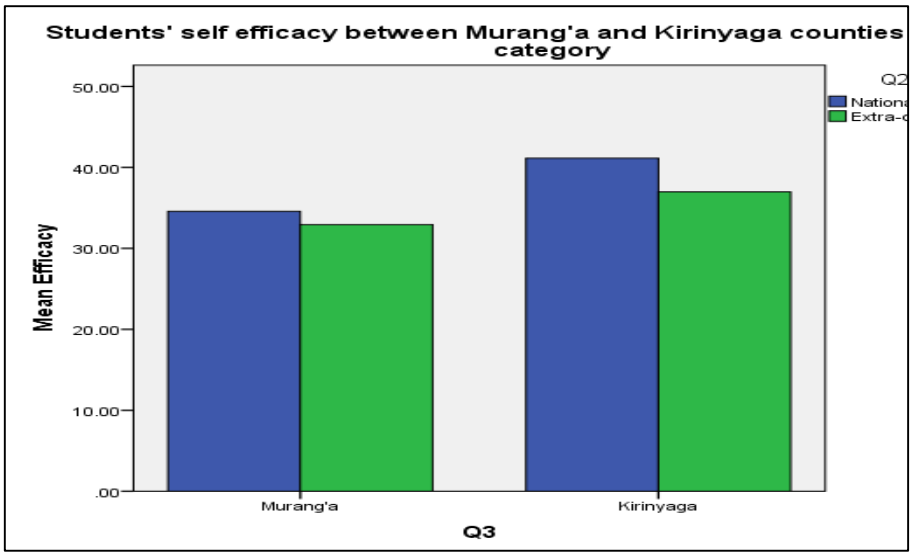

Figure 3. Analysis of regression of learners' self-efficacy by school categories and counties

5. Conclusion

Self-efficacy represents an individual's trait which is associated with confidence that a person develops when involved in some activities. The overall perceived self-efficacy of students in national and extra-county schools in Murang'a and Kirinyaga counties was high. This high level of self-efficacy is attributed to the high level of school categories selected for this study; the national and extra-county schools. The self-efficacy is significantly higher in Kirinyaga than in Murang'a county students. It correlated positively and significantly with academic performance. This suggests that Kirinyaga county students could be doing better academically than their counterparts in Murang'a County. The fact that there was no significant difference in the self-efficacy between male and female students suggest that the academic performance of male and female students is comparable. The level of self-efficacy does not only depend on the entry behaviour or school category only, but also location of the school. The schooling environment also plays a significant role in influencing self-efficacy of learners. A significant relationship was noted between self-efficacy and school category such that students in national school scored more than those in extra-county schools. The academic performance of learners in national and extra-county secondary school could be proportional to the self-efficacy beliefs. The significant difference between perceived self-efficacy of students in Murang'a and Kirinyaga counties could therefore explain why students in Kirinyaga county consistently did better than the Murang'a county students in the KCSE as noted in the past 6 years (2012-2017).

Consequently, the least efficacious students are the most sensitive to the influence of academic performance by the self-efficacy. This suggests that enhancing self-efficacy in students could stabilize their academic performance and address the perennial problem of underachievement. The government should introduce in the teacher training formation based skills to equip teachers with necessary knowledge to empower learners' self-efficacy.

Recommendations

From the findings of the study, the following recommendations were made;

a) There is need to prioritize on the enhancement self-efficacy of students as an integral component of the teaching and learning process.

b) The need to strengthen the pedagogical competence of teachers during the pre-service and the continuous professional development in order to enable them to effectively shape the self-efficacy and holistic personality development of students.

c) The need to structure the teaching-learning processes in ways that promotes learner-centeredness, experiential and interactive academic pursuits that lead to shaping of their self-efficacy.

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