



ISSN: 0975-833X

Available online at <http://www.journalcra.com>

International Journal of Current Research
Vol. 11, Issue, 04, pp.3527-3541, April, 2019

DOI: <https://doi.org/10.24941/ijcr.35267.04.2019>

**INTERNATIONAL JOURNAL
OF CURRENT RESEARCH**

RESEARCH ARTICLE

INFLUENCE OF STUDENT FACTORS ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN KENYA: A CASE STUDY OF MIGORI COUNTY

Hezekiah Otieno Omolo, *Enose M.W. Simatwa and Alfred Otara

¹Department of Educational Management and Foundations, Rongo University, Kenya

²Department of Education Policy and Management, Tom Mboya University College, a Constituent College of Maseno University, Kenya

³Department of Educational Management and Foundations, Rongo University, Kenya

ARTICLE INFO

Article History:

Received 09th January, 2019

Received in revised form

12th February, 2019

Accepted 15th March, 2019

Published online 30th April, 2019

Key Words:

Student factors, Students' Academic Performance, public secondary school, Migori County, Kenya

*Corresponding author:

Enose M.W. Simatwa

ABSTRACT

Students' academic performance in examinations is used to gauge the quality of the education system. Examination outcome has been used as the major basis for deciding a student's ability and used as a means of acquiring employment and advancement in careers. The importance of education to both national and individual development is indisputable. Many students do not excel in national examinations in many countries around the world, Kenya included. In Kenya the dismal performance has raised alarm and efforts have been made to identify factors that lead to this poor performance but the problem still persists. Therefore, the purpose objective of the study was to establish influence of student factors on students' academic performance in public secondary schools. It was established that students factors significantly influenced students' academic performance. The student factors accounted for 9.2% of the variation of the students' academic performance in secondary schools as signified by the adjusted R square. 092. This implies that 90.8% of the variation in students academic performance was due to other factors which were not the subject of this study. Since the influence was significant ($P < .05$) it means that students academic performance can be predicted by students factors. This data is significant to stakeholders in education and particularly the Directorate of Quality Assurance and principals of secondary schools.

Copyright © 2019, Hezekiah Otieno Omolo et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Hezekiah Otieno Omolo, Enose M.W. Simatwa and Alfred Otara. 2019. "Influence of Student Factors on Students' Academic Performance in Public Secondary Schools in Kenya: A Case Study of Migori County", *International Journal of Current Research*, 11, (04), 3527-3541

INTRODUCTION

Access to school has been appreciated throughout the world since 1990, despite the fact that learning outcomes have lagged behind (UNESCO, 2015). One fundamental issue that has pre-occupied researchers minds for decades is the reason why some public schools perform well in examinations while others consistently perform dismally. For example, in Pakistan results of boards of secondary schools revealed that almost half of the students failed in secondary level examinations (Punjab Statistics Bureau, 2008). In most European countries, academic performance is still low especially among senior secondary schools (European Union Monitoring Report, 2013). In Africa, for example in Nigeria, many students do not perform well in the senior secondary certificate examinations (Alokan, Osakinle and Onijingin, 2013). According to UNESCO 2011 report on the state of education of the world's children education, many children in the Sub Sahara Africa are discouraged from getting good education to better their livelihood. The report further reiterated that many adolescents that transit to secondary school in Sub Sahara Africa in the recent years do not get quality education that would prepare them for further education and the world of work.

Many students do not perform well in national examinations in many countries around the world; Kenya included (European Union Monitoring Report, 2013). The poor performance has raised concern and efforts have been made to find out what factors constitute to this. A number of school based factors have been cited for this phenomenon such as lack of facilities in schools, parental support, inadequate staffing, student discipline, unfavorable school and home environment (Ndiragu, 2007). The influence of school based factors on students' academic performance in Kenya public secondary schools has been experienced throughout history and continues to be a topic of discussion in a number of educational sectors (Njagi, 2013). School based factors are variables that influence the attainment of students' academic Performance. Some of these factors are; principals' leadership skills, students' factors, school environmental factors and parental factors (Njagi, 2013). Another important aspect that is school based is student's factors. These are the situations in school or learning atmosphere that are at the students' disposal and have an effect on their academic performance in schools (Peter, Bantu and Martin, 2016). Therefore, in this study, several aspects were identified from literature review including; students' ambition, learner's individual efforts, learners' attitude on subjects

(Chepkorir, Cheptonui, Chemutai; 2014), lack of learners' ambition, learners' competitive spirit, learners own set targets, students' unrest and absenteeism from school, Students' discipline in schools, Participation in co-curriculum activities; (Lourdes, Monteiro and Peixoto, 2012; Al-Musa and Saeed, 2016). However, for in-depth interrogation, Students' focus and attitude, discipline and drug abuse, and involvement co-curriculum activities were studied.

Research Objective: The research objective was to establish the influence of student factors on students' academic performance in public secondary schools in Migori County.

Synthesis of literature on influence of student factors on students' academic performance: Student factors are the circumstances in school or learning situations that are at the students' disposal and have an effect on their academic performance in schools (Peter, Bantu and Martin, 2016). A study carried out by Peter, Bantu and Martin (2016) found out that poor performance in Mathematics in Masaba South sub-county schools was due to poor attitude of students' lack of ambition, poor career choice, influence from other students, lack of competitive spirit, and no desire to set targets, among others. This study used qualitative data whereas in the present study, the researcher used both qualitative and quantitative data which allowed for the confirmation of information gathered from the questionnaire.

Wabuke (2013) conducted a study on the role of student – related factors in performance of Biology in secondary schools in Eldoret Municipality. The results showed that student-related factors influencing performance of Biology in Eldoret Municipality are: primary school Science which provides a requisite background for Biology at secondary school level; interest in Biology (theory and practical) provides a force for students to participate in the learning process; their ability to carry out the practical effectively and students' ambition and attitudes. This is also confirmed by a study on effect of students' academic motivation and academic performance among high school students in Kenya, by John, Jackson and Catherine (2015) who indicated that there was a positive relationship between academic motivation and academic performance. This study used only Biology subject whereas in this current study the researcher used Kenya Certificate of Secondary Education school mean performance taking into consideration all other factors influencing students' performance at secondary school level. Lourdes, Monteiro and Peixoto (2012) conducted a study on attitudes towards Mathematics and found out that students held positive attitudes towards mathematics and also highlighted the main effects of grade and Maths achievement on these attitudes. The study noted that no gender effect was identified although the girls showed a continuous decline in attitude the further they progressed in school. While the study was able to establish attitude and performance, the main focus was on Mathematics as opposed to the present study which used the students' mean score. A study on influence of psychosocial factors on students' academic performance in one of Nigerian colleges of education by Ali, Munira and Nobaya (2017) showed that only attitude and interaction could significantly predict students' academic performance by $R^2=65.6\%$. This means academic self-efficacy did not predict academic performance in present study. This study was done in college whereas in the current study, the researcher collected data from public secondary schools.

Awodun, Adekunle and Femi (2016) conducted a study on student's attitude and interest as correlates of students' academic performance in biology in senior secondary school and showed that there is significant relationship in the students' attitude to Biology and students' academic performance in Biology. Gilman (2016) also found that students differed in terms of their mastery of English, scoring higher in the structure section, while composition was the most poorly scored section based on the attitude formed by the students on the subject. The results observed that students in both form one and form four had strong and positive attitudes to English. The study concluded that form one students had more positive interest attitudes than their counterparts, form four students. Another study done by Akinyemi (2009) on improving students' attitude towards secondary school Physics through the use of cooperative, competitive and individualistic learning strategies also found out that cooperative learning strategy was the greatest effective in facilitating students' attitude towards physics. This study relied on subjects as opposed to the current study which considered general school mean performance to avoid biasness. Oluremi (2011) conducted a study on attitude of regular students and academic performance of the students with special needs in integrated setting. This findings of the study revealed that most regular students had positive attitude to learners with special needs while few regular students had negative attitude to learners with special needs. The findings further noted that there was no significant difference between the attitude of male and female regular students to learners with special needs. This study focused on special needs students as opposed to the current study which considered all categories of learners in public secondary schools in Migori County.

Nyongesa (2015) carried out research on teacher's perspective on the challenges in the delivery of content and the performance in Biology. The results found out that female teachers possess a higher level of science anxiety in the teaching of Biology compared to the male teachers. The findings further determined that most teachers still used the traditional lecture method in the teaching of Biology and only a smaller percentage was using the new approaches. This study focused on challenges experienced by teachers whereas the current study focused on students as the main respondents. A study by Chepkorir, Cheptonui and Chemutai (2014) on the relationship between teacher- related factors and student's attitudes towards secondary school chemistry subject in Bureti District. The results indicated that there are some factors influencing students' attitudes towards Chemistry, including lack of successful experiences in Chemistry and inadequate teaching. From the previous studies, it evident that the researchers were determined to establish the relationship between students' attitude and performance by focusing specific subject areas such as Physics, Chemistry, Biology and Mathematics thus failing to address all subject areas and categories of learners thus prompting the present researcher to conduct an all-inclusive study. The worrying evidence in the prevalence of drug abuse, the effects and consequences of substance abuse among students has called for concern and challenge to all assisting professions, including teachers (Akanbi, Augustina, Bahago, and Muritala, 2015). Alcohol and drug consumption may have some detrimental effects on pupils' cognitive abilities, for instance, by declining their ability to concentrate (Ajala, 2012), undermine students' progress by putting them less likely to attend classes or keep up with their studies (Chukwu, et al, 2017).

Moses, Augustina and Rahama (2018) did a study on drug abuse and academic performance among adolescent students in Nigeria. The study noted that drug abuse influence students' academic performance negatively. The findings further revealed that gender has a significant predictor of reported drug abuse and males have been reported to have a greater degree of drug abuse that greatly affects their academic performance in public secondary schools. Whereas the previous study was done in Nigeria, the present research was focusing Migori County in Kenya to fill the knowledge gap. A study on alcohol consumption behavior amongst secondary school students in Nigeria by Bada and Adebisi (2014) showed that family background and religion were strong correlates of alcohol consumption among secondary school students. The results further indicated that the family should take appropriate steps in curbing their children and also that religious bodies approach the issues of alcoholism with more strong measures to help in enhancing learners academic performance by helping to eradicate drugs sold to students. The previous study was conducted in Nigeria whereas the present study was done in Kenya. Nwankwo, Sydney, Agbor and Mgbenkemdi (2013) further examined the effect of gender and locality on alcohol abuse among secondary school students. The study showed that there is a significant influence of gender on substance abuse. He further observed that there is significant influence of locality on substance abuse and addiction. The researchers concluded that there was a significant effect of drug abuse and students' academic performance. This current study took into consideration the overall mean score for students in general to avoid biasness.

A study on Substance abuse among male secondary school students in Abha City, Saudi Arabia by Al-Musa and Saeed (2016) found out that the prevalence of substance abuse among male secondary school students in Abha City is quite high. This study observed that most public schools in this region do not perform well in examinations due the drug influence. The study further noted that selling of drugs to students should be made illegal and punishable in courts of law. This study focused on males only as opposed to the current study which considered both males and females. A study on principal's management skills and students' unrest in public secondary schools in Nairobi County, Kenya by Cheloti, Obae and Kanori (2014) found out that there was no clear management style that was predominant in the schools surveyed. This researcher further revealed that mock exams, diet, bullying, high handedness of principals, pressure from other schools, transfer of principals, lack of communication between students and the principals, poor facilities, and drug and substance abuse were common causes of student's unrest. This study was done in Nairobi which has a different environment as the current study which concentrated in Migori County. Another study on types, causes and management of indiscipline acts among secondary school students in Shomolu Local Government area of Lagos State by Ali, Dada, Isiaka and Salmon (2014) indicated that various acts of indiscipline were prevalent among secondary school students. It further gathered that several factors like the schools, students and the society at large contributed greatly to the acts of indiscipline among the students. It again found that reduction strategies employed by various schools are not effective. Kambuga and Abich (2017) conducted a similar study in secondary schools in Tanzania and showed that good discipline, confidence and academic competence were the major qualities that aided most students in their academic performance.

The previous studies were carried out in Nigeria and Tanzania respectively which had different environments as compared to the current study. A study on alcohol consumption behaviour amongst secondary school students in Nigeria by Bada and Adebisi (2014) indicated that family background and religion were strong correlates of alcohol consumption among secondary school students. The findings further noted that the family should take appropriate steps in curbing their children and again that religious bodies approach the issues of alcoholism with more firm measures. Nwankwo, Sydney and Mgbenkemdi (2013) observed that there is significant influence of locality on substance abuse. The researchers also showed that there was a significant interaction influence of gender and locality on substance abuse among adolescents. This study only used quantitative data whereas the current data used both quantitative and qualitative data. Okwakpam (2012) conducted a study on learners' discipline and students' unrest among students in secondary schools. The study indicated that there is significant close relationship between student's unrest and discipline on learner's academic performance. The study also noted that the student's indiscipline contributes greatly to the student's level of performance and achievements.

Kiplagat and Mugasia (2014) established further that the presence of drugs, lack of enough facilities and food causes, students who have a negative attitude towards their schools, who do not do well in exams, who feel teachers do not understand their behaviour, receive peer influence and often resort to violence, to express their dissatisfaction; all were the major causes of violence in schools. Likewise, Atemi and Ondieki (2012) found that boys were the predominant drug users who made up at least two thirds of drug users in the hard drugs category. The researchers observed that the majority of the users of alcohol were boys and this could be the reason why girls are doing better than boys in a number of mixed schools in Kisii County, Kenya. Tom, Japhet, Njuguna, Waweru, Benson and George (2014) conducted a study on effects of drugs on learners' academic performance in public secondary schools in Tana River County, Kenya. The study found that there is a positive relationship between the drug addiction and students' performance. The study noted that drug abuse was established to have a significant effect on the students' performance in national examinations. This study used a population of nine schools only which is a very small size to be used in drawing conclusion in the county whereas the current study involved all the 245 public secondary schools in Migori County. A study on influence of drug use on academic performance among secondary school students by Mary (2015) indicated that drug use is very common among secondary school students in Matinyani District. The results indicated that it leads to poor academic performance and rise in indiscipline cases among students. The study, however, involved very limited number of respondents, 14 schools considered not to have given appropriate outcome whereas in the current study, the researcher used more than 100 secondary schools which are good enough for generalizing. Chebukaka (2014) revealed that the extent of involvement in drugs by students in public secondary schools in Vihiga County was more than fifty per cent. Chebukaka further revealed that the commonly abused drugs by students in public secondary schools in Vihiga County are alcohol, cigarettes, miraa, and marijuana which have negatively affected learners' academic performance. Similarly, Muusya and Kariuki (2015) earlier noted that abuse of drugs by students' leads to poor academic performance and

rise in indiscipline cases among students. These studies used quantitative method only whereas the current data was both quantitative and qualitative methods of data analysis. Sombor and Vojvodina (2014) conducted a study on individual and social factors related to students' unrest and academic achievement. The study found a positive correlation between individual and social factors on students' unrest. Individual factors, that is the perceived interest in an individual student and perceived content usefulness for personal gain through peer influence proved to be the most significant predictors of students' unrest and misbehaviors. This study used only students as major respondents while the current study involved principals, students as the respondents. Nandeke, Chumba and Kiprop (2017) did a study on rethinking of public secondary school's discipline in Kenya and revealed that students were haphazardly involved in the school management of students' discipline. Belle (2018) also conducted a study on the causes of lack of discipline among secondary school learners and observed that the causes of students' lack of discipline originate from the family, the learners' attitudes to education and schooling. Vumilia (2016) also noted a variety of challenges and dimensions of learners' discipline engulfed in classroom and school discipline discourses of rewards and punishment. Ehiane (2014) equally did a study on the same and concluded that effective school discipline should be encouraged in controlling students' behaviour thus influence students' general academic performance.

A study on student indiscipline and academic performance in public secondary schools in Kenya by Rebecca (2012) revealed that strikes lead to poor academic performance. The study further observed that the schools that had not been involved in unrests on average had more counselors than the schools that had unrests. The cited studies show that indiscipline and academic performance are closely related but the respondents used in the study was limited to teachers only. Furthermore, there was no attempt to determine the level of relationship between the independent and dependent variable, students' academic performance thus prompting the present study. According to Onyango and Simatwa (2016), physical punishment is one of the main contributors to indiscipline among students. Belle (2017) also noted that the school, the family, the peer pressure, the community and the new media negatively impact on the student behaviour. Ruirie, Kimosop and Kagema (2017) studied the use of alternative methods of enforcing students' discipline in primary schools in Nyeri Central Sub-County, Kenya. The research found that most of the teachers used guidance and counselling in enforcing discipline in secondary schools despite some still use corporal punishment; it further revealed that learners need to be educated on the importance of obeying school rules. This study was done in primary schools whereas the present study was done in secondary schools. Otieno, Simatwa and Gogo (2016) conducted a study on the influence of mental harassment ban on student discipline in secondary schools in Kenya: a case study of Ugenya, Gem and Siaya Sub-Counties and established that there was a strong, positive and significant relationship between the level of mental harassment ban and students' discipline, however the study did not establish if the student discipline eventually influences the academic outcome of the students thus the knowledge gap that the present study filled. Fujita (2018) carried out a study to determine whether or not the activities in which junior high school students chosen to participate have an impact on their academic performance. The study's survey instrument which was distributed to students

enrolled in grades 6 through 8 at Walnut Creek Christian Academy during the 2004-2005 school using a five Likert-type scale questions. The data indicated that, according to the students surveyed, playing sports, watching television, and participating in community service improve academic performance, while playing a musical instrument does not improve academic performance. Therefore, it was concluded that extracurricular activities influence academic performance and that the effect depends on the specific activities in which the student is involved. Gail (2018) carried out a study to examine the influence of secondary school students' involvement in academic co-curricular activities on their academic performance in a Northeastern State of the United States. Data consisted of de-identified data taken from school student information systems. The number of academic co-curricular activities, the length of time for which a student participated, and his or her grade point average were included as variables in the study. The research questions for this study were answered using descriptive statistics. The results of the regression analysis suggested that academic co-curricular activity participation improves school students' learning as measured by grade point averages, while gender, ethnicity, and school type were also identified as potential moderators of academic outcomes. The previous study was conducted in USA while the current study was done in Kenya.

Muhammad, Tahir, Ali and Maubeen (2012) in their study revealed that the fact that involvement in the co-curricular activities produces its impacts on academic performance of the students, in their study, they are yet purposed to establish whether co-curricular activities in which university students participated in Bahawalpur in Pakistan had a positive effect on their academic performance. The study was conducted by using the questionnaire filling technique which was distributed among 500 students of the university. According to responses from the students, those involved in any kind of sports, drama and other literary activities positively affects their academic performance, while watching the television has also some positive impact on academic performance. They concluded that co-curricular activities affect academic performance of the students and this impact also depends upon those activities in which the students are keenly involved in. The previous study was conducted in Pakistan while the present study was conducted in Kenya. In another study by Al-Musa and Saeed (2016), to determine the relationship between learners' participation in co-curricular activities and their performance in academics, it was noted that while some studies report positive impacts of co-curricular activities, a significant number reports negative impacts. In their study, they employed the concurrent mixed methods design. The study's data collection techniques were stratified and simple random sampling techniques, from which a sample consisting of 250 students, 15 co-curricular teachers, and 5 Principals were selected. Descriptive statistics and thematic analysis was used to examine qualitative data. Multiple regressions model was used to establish determinants of academic performance from the selected co-curricular activities. Kapelinyang and Lumumba (2017) concluded that athletics, music, and soccer were positive and significant determinants of students' academic performance, and recommended that more facilities that could promote co-curricular activities be availed in schools. These recommendations underscore the importance of co-curricular activities but does not quantify the extent to which these activities influence academic performance as opposed to the present study.

CONCEPTUAL FRAMEWORK

The conceptual framework that was used in this study postulated that there was a hypothetical link or relationship student factors as independent variables and students' academic performance as the dependent variable (Figure 1). Student factors refers to the circumstances in school or learning situation that are within the students' disposal and have an impact on their academic performance in schools (Peter, Bantu and Martin, 2016). Therefore, in this study, several aspects were identified from literature review including; students' ambition, learners' individual efforts, learners' attitude on subjects (Chepkorir, Cheptonui and Chemutai; 2014), lack of learners' ambition, learners' competitive spirit, learners own set targets, students' unrest and absenteeism from school, Students' discipline in schools, Participation in co-curriculum activities; (Lourdes, Monteiro and Peixoto, 2012; Al-Musa and Saeed, 2016). However, for in-depth interrogation, Students' focus and attitude, discipline and drug abuse, and involvement co-curriculum activities were studied. Intervening variables serve as moderating factors on the influence of student factors (independent variable) on students' academic performance (Dependent variable). Government policies form the foundation upon which school activities and decisions are executed, therefore the Principal is expected to strictly adhere to them while dealing with student factors in his endeavours to promote students academic performance.

RESEARCH METHODOLOGY

The study used descriptive survey and correlation research designs.) The study population was 245 principals and 14300 students within Migori County. Fisher's formula (Mugenda and Mugenda, 2003) was used to determine the sample sizes. The sample sizes consisted of 152 principals and 384 students, 120 students and 20 principals were interviewed whereas 116 principals were issued with questionnaires in which the response rate was 116(76.31%). Both questionnaire and interview schedule were used for principals and focus discussion group for students were used to collect data. Piloting was done to establish reliability of instruments; where 24 principals, 16 students were involved in piloting. Cronbach's alpha was used to determine reliability of the questionnaires. Principals' questionnaires attained reliability coefficient of 0.79. Experts in Educational management and foundations were used in determining validity of the instruments by including their input in the content and face validity of the instruments. Analysis of quantitative data was done using frequency counts, Percentages and means, and regression analysis while qualitative data was coded, transcribed and organized thematically.

RESULTS

Demographic Data of Respondents: The study sought to investigate the demographic characteristics of the participants. This information was considered necessary for the determination of Sub Sahara Africa for the determination of whether the respondents were representative sample of the target population for generalization of the results of the study. Demographic information investigated in this study includes gender, category of schools and nature of schools where the respondents come from. From Figure 1, it is clear that most of the principals were males, with females being about a third of

the principals who participated in the survey, implying that majority of the secondary school principals in Migori County were males signifying glaring gender disparity. However, this may not be surprising because it is generally believed that although teaching is inherently dominated by female teachers, this is not the case in Kenya secondary schools. Predominant gender of secondary school teachers in Kenya is male, a fact that is confirmed by this study. On the same note this finding indicates male are more in the leadership position than their female counterparts. However, it is noted that both gender was represented in the study.

School Data: Students' academic performance was assessed on the basis of students' performance in examinations. Performance in Kenya Certificate of Secondary Education examinations was therefore, it is a good indicator of the academic performance of students in a school. This is because of its being a standardized instrument and therefore is reliable for measuring students' academic performance. The principals were asked to indicate the school's overall mean score in Kenya Certificate of Secondary Education examinations in the last eight years (2010-2017). Table 1 shows the schools' mean average score in Kenya Certificate of Secondary Education examinations for these years. From Table 1, it is clear that most of schools had low average mean grade in Kenya Certificate of Secondary Education Examinations, with only 87.07% of them having a mean of less than 7.20. Equally, the findings of the study show that over the last eight years, most secondary schools in Migori County recorded fairly low performance in Kenya Certificate of Secondary Education examinations. This was reflected by the summaries of the sampled schools' Kenya Certificate of Secondary Education Examinations mean scores as indicated in Table 2.

It is evident that the county's mean scores in Kenya Certificate of Secondary Education Examinations has not gone beyond seven points, as indicated by the summary of average mean scores for the sampled schools in the last eight years. Within this period, the best score was recorded in the year 2015 at 6.38 with a standard deviation of 1.94, while the worst mean score was recorded in 2016 at 4.78 with a standard deviation of 1.64. Further exploration of 2017 Kenya Certificate of Secondary Education Examinations examination results for Migori County reveals that most of the secondary schools did not do very well in 2017 Kenya Certificate of Secondary Education Examinations, as was revealed by a mean average score of only 4.96 (standard deviation=1.73) from the sampled schools. The relatively large standard deviation of 1.73 shows that the scores were quite spread and not very close to the mean, implying that the data was quite skewed as indicated in Figure 2. The distribution curve reveals that the scores were positively skewed; there is a long tail and distortion that is caused by many small values which pull the mean downward so that it is less than the median, indicating that most of the schools scored below the mean of 4.96. This finding mirrors the records held at the County Director of Education's Office, Migori (2018). Principals were also asked to indicate the proportion of the students who had got grade C+ and above. Table 3 shows mean average percentage of the students per school in the county who scored at least C+ and above in Kenya Certificate of Secondary Education Examinations in the last eight-year period. It is clear that the percentages were under forty percent, except in the year 2015 with an average mean of 40.4% (standard deviation =32.42). The worst years were 2016 and 2017 at 21.3% and 20.4%, respectively. These findings point out that significant majority of the students got

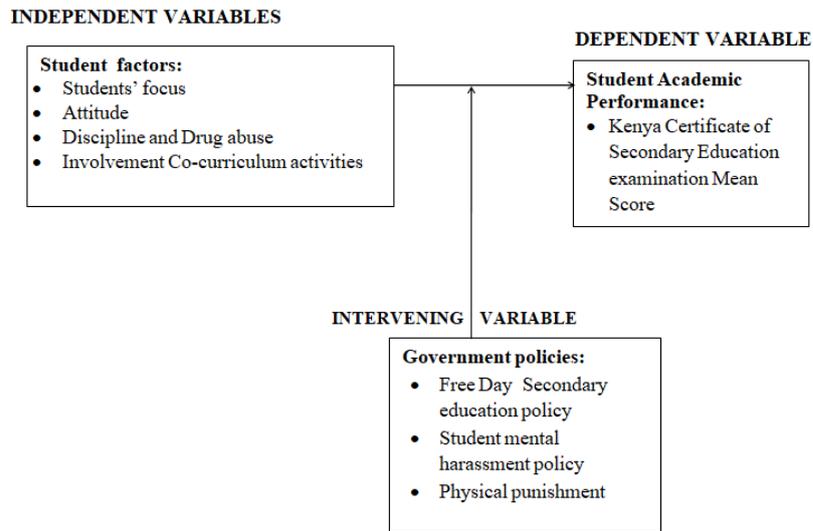


Figure 1. Conceptual Framework showing Influence of student factors on Students' Academic Performance



Figure 1. Distribution of the Principals by gender

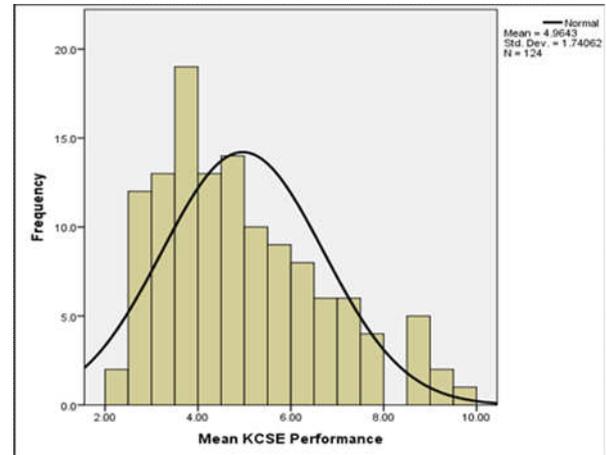


Figure 2. Distribution of Kenya Certificate of Secondary Education Examinations 2017 School Mean Score in Migori County

Table 1. Kenya Certificate of Secondary Education Examinations Mean Scores

Performance index	Number of Schools	Frequency %	Cumulative Frequency %
1.00-2.54	2	1.72	1.72
2.55-4.09	42	36.21	37.93
4.10-5.64	30	25.86	63.79
5.65-7.19	27	23.28	87.07
7.20-8.74	12	10.34	97.41
8.75-10.29	3	2.59	100.0
10.30-12.00	0	0.00	100.0
Total	116	100.00	

Source: Field data (2018)

Table 2. Kenya Certificate of Secondary Education Examinations Average Mean Scores- Migori County 2010-2017

Year	2010	2011	2012	2013	2014	2015	2016	2017
Mean	5.81	6.06	5.85	6.18	6.17	6.38	4.78	4.96
SD	1.57	1.54	1.81	1.82	1.73	1.94	1.64	1.73

Source: Field data (2018)

Table 3. Mean Average Percentage of students who got C+ and above

Year	2010	2011	2012	2013	2014	2015	2016	2017
Mean (%)	31.90	35.39	37.24	37.65	37.42	40.44	21.25	20.35
SD	27.12	28.30	31.61	33.64	32.65	32.28	17.12	15.89

Source: Field data (2018)

Table 4. Influence of Student Factors on students’ academic performance (n=116)

Students’ factors	Principals Ratings	
	Mean	Std Dev.
X ₁ Students’ ambition	4.09	0.91
X ₂ Learners individual efforts	4.03	0.79
X ₃ Learners’ attitude on subjects	4.14	0.88
X ₄ Career choice and lack of learners’ ambition	3.71	0.99
X ₅ Learners’ competitive spirit	4.15	0.79
X ₆ Learners own set targets	4.09	0.86
X ₇ Substance abuse	3.52	1.45
X ₈ Students’ discipline in schools	4.23	0.81
X ₉ Students’ unrest and absenteeism from school	3.63	1.36
X ₁₀ Participation in co-curriculum activities	3.67	1.19
Overall Ratings on Student factors	3.92	0.52

Source: Field data (2018)

Interpretation of mean rating:

- 1.00 -1.44 = Very low
- 1.45 -2.44 = Low
- 2.45 -3.44 = Moderate
- 3.45 -4.44 =High
- 4.45 -5.00= Very high

Table 5. Model Summary of Regression Analysis of the influence of Student Factors on Students’ Academic Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.316 ^a	.100	.092	1.58853	.100	12.666	1	114	.001

Predictors: (Constant), Students’ Factors

Dependent Variable: Students’ Academic Performance

Table 6. ANOVA on Influence of Student Factors on Students’ Academic Performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.961	1	31.961	12.666	.001 ^b
	Residual	287.671	114	2.523		
	Total	319.632	115			

a. Dependent Variable: Students’ Academic Performance

b. Predictors: (Constant), Student Factors

Table 7. Multiple Regression Analysis of Influence of Student Factors on Students’ Academic Performance

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.421	1.196		.352	.725
X ₁	.274	.167	.149	1.636	.105
X ₂	-.276	.238	-.132	-1.160	.249
X ₃	-.273	.214	-.145	-1.277	.205
X ₄	-.026	.166	-.016	-.158	.874
X ₅	.606	.235	.289	2.582	.011
X ₆	.310	.193	.160	1.605	.014
X ₇	-.158	.155	-.138	-1.021	.310
X ₈	.564	.209	.276	2.692	.008
X ₉	.236	.169	.194	1.400	.165
X ₁₀	-.148	.123	-.106	-1.198	.234

a. Dependent Variable: Students’ Academic Performance

b. Regression Equation: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_{10} X_{10}$

KEY: X₁-Students’ ambition

- X₂- Learners individual efforts
- X₃- Learners’ attitude on subjects
- X₄- Career choice and lack of learners’ ambition
- X₅- Learners’ competitive spirit
- X₆- Learners own set targets
- X₇- Substance abuse
- X₈- Students’ discipline in schools
- X₉-Students’ unrest and absenteeism from school
- X₁₀-Participation in co-curriculum activities

below C+, which is an indication that most of secondary school students in Migori County perform poorly in Kenya Certificate of Secondary Education Examinations, which is a pronounced wastage in education. However, fairly large standard deviations shown in the table implies that there is big

disparity between schools in terms of students’ performance in Kenya Certificate of Secondary Education Examinations; some schools perform quite well while others perform dismally.

Research Objective: The research objective responded to was: To establish the influence of student factors on students’

academic performance in public secondary schools. The study used both descriptive and inferential statistics to establish the influence of student factors on students' academic performance. Principals were asked to rate the influence of students' factors on their academic performance. The respondents were presented with items whose constructs measured students' factors and they were to rate them on the scale of 1 to 5, based on their influence on academic performance. The respondents rated students' factors using the indicators of; Students' ambition, Learners individual efforts, Learners' attitude on subjects, Career choice and lack of learners' ambition, Learners' competitive spirit, Learners own set targets, Substance abuse, Students' discipline in schools, Students' unrest and absenteeism from school, Participation in co-curriculum activities. Their responses were summarized in mean and standard deviation as indicated in Table 4.

From Table 4, it can be revealed that students' factors have substantial amount of influence on secondary school student academic performance. On the scale of 1 to 5, the principals who took part in the survey rated overall influence of students' factors on academic performance at 3.92 (SD=0.52), implying that it has a high influence. When the respondents were asked to rate the influence of various constructs of student's factors on their academic performance, it emerged that students' discipline was chosen as the factor with the highest influence on academic performance among secondary school students. This was reflected by a mean of 4.23 (SD=0.81) as rated by the principals. Equally, learners' competitive spirit was rated as of high influence [principals (mean=4.15) with a significant majority of principals asserting that student personal competitive spirit is vital for student academic performance. The results of the survey point out that personal effort and commitment of students is of great influence on the students' academic performance. For example, the principals rated the influence of students' ambition, learners' individual efforts and learners' attitude on the subjects at 4.09 (SD=0.91), 4.03 (SD=0.79) and 4.14 (SD=0.88), respectively. It also arose that participation in co-curriculum activities has some influence on academic performance. This was confirmed by a mean rating of 3.67 (SD=1.19) on the influence scale by the principals.

To establish the actual influence of students' factors on their academic performance, the null hypothesis 'Ho₂: Student factors do not influence students' academic performance' was used. In this respect, the data in Tables 1 were used to compute regression analysis. The results were as shown in Tables 5, 6 and 7. From the model, 9.2% of the variation in students' academic performance in public secondary schools was explained by student factors, as signified by Adjusted R Square of .092. Ninety point eight percent of variation in students' academic performance was due to other factors which were not subject of this study. The Null hypothesis; Student Factors have no significant influence on students' academic performance was rejected because $r = .316$, $N=116$, and $p < .05$. This means that Student Factors Influence Students' Academic Performance. However, to establish whether student factor was really a significant predictor of academic performance, Analysis of Variance (ANOVA) was computed as indicated in Table 6. From Table 6, which is ANOVA results output-ratio, tests whether the whole regression model is a good fit for the data. It is evident that, despite the small effect, student factors statistically significantly predict students' academic performance, $F(1, 114) = 12.666$, $p = .001$. This means that the regression model is a good fit of the data,

implying that information about student factors could be used to predict students' academic performance in public secondary schools. To determine the actual influence of student factors, multiple linear regression analysis was computed and the results were as indicated in Table 7. From Table 7, it can be observed that 3 student factors out of 10 were established to be predictors of students' academic performance. This implies that they significantly influence students' academic performance. These factors were; Learners' competitive spirit, Learners own set targets and Students' discipline in schools. The prediction model therefore is as follows; Students academic performance = $.421 + .606X_5 + .310X_6 + .564X_8$ Students' ambition, Learners individual efforts, learners attitude on subjects, career choice and lack of learners ambition, Substance abuse, Students' unrest and absenteeism from school and Participation in co-curriculum activities were not significant predictors of students' academic performance. This means that they cannot be relied on to predict students' academic performance. This also means that if schools have to improve on performance, then the focus should be on Learners' competitive spirit, Learners own set targets and Students' discipline in schools. Learners' competitive spirit is strong followed by Students' discipline in schools then Learners own set targets and therefore tend to override other factors found not to be significant and perform better and vice versa.

DISCUSSION

Students' interest in learning, ambition, positive attitudes towards education and competition among the students, propel learners to work hard towards good academic performance as shown by the findings of the study. This is supported by Ali, Munira and Nobaya (2017) who indicated that only attitude and interaction could significantly predict students' academic performance. On the other hand, indiscipline, lack of motivation, drug use, poor study habits and unrest among students negatively impact on students' academic performance. This is in line with the findings of Moses, Augustina and Rahama (2018) who established that drug abuse influence students' academic performance negatively. The findings further revealed that gender has a significant predictor of reported drug abuse and males have been reported to have a greater degree of drug abuse that greatly affects their academic performance in secondary schools. This is also further supported by Muusya and Kariuki (2015) who discovered in their study that abuse of drugs by students' leads to low academic performance and increase in indiscipline cases among students. From the above arguments, it is clear that students who have a negative attitude towards head teachers in terms of leadership skills and have problems in communicating their concerns will disobey school rules and regulations and if not closely monitored and counselled properly, may turn violent in expressing their dissatisfaction. During the focus group discussion, it was noted from the students that school based factors is of paramount importance in promoting learning process. The students argued that climate prevailing in the school is a perpetual inspiration for them to learn more and more. This they stated can be created by providing them with good class rooms for the study, providing books and other learning materials. These were reiterated by group FG 4 as: "Some of the positive factors in our school that affects our academic achievements include; presence of teachers who are always dedicated and ready to help us at all cost. The school has been well managed and the environment secured and strict

school rules and regulations. The school leadership has been of democratic nature, one that provides more sense of freedom and large degree of permissiveness to foster healthy teacher student relationship and where pupils are allowed to work independently” (FG 4). From the excerpts, it can be seen that school environment remains an important factor affecting academic achievement that should be well managed to improve learner’s academic performance. The issue of poor academic performance of students in Migori County has been of much concern to the government, parents, teacher and even students themselves. The quality of education not only depends on the teacher as reflected in the performance of their duties but also in the effective coordination of the school environmental factors. Kambuga and Abich (2017) in their study established that good discipline, confidence and academic competence were the main qualities that aided most students in their academic performance. This was further confirmed by Rebecca (2012) who indicated that strikes lead to poor academic performance. The study further observed that the schools that had not been engaged in unrests on average had more counsellors than the schools that had unrests. Equally, learners’ competitive spirit was rated as of high influence with a significant majority of principals asserting that student personal competitive spirit is vital for student academic performance. This was in line with Akinyemi (2009) who established that cooperative learning strategy was the best effective in facilitating students’ attitude.

Peter, Bantu and Martin (2016) who established that poor attitude of students, students’ lack of ambition; poor career choice, peer influence, lack of competitive spirit and no desire to set targets affect academic performance. Closely related to personal commitment, was target setting. It emerged from the results of the study that learners who are able to set their own targets usually post high self-academic performance. This supports the findings of Awodun, Adekunle and Femi (2016) who showed that there is significant relationship in the students’ attitude and students’ academic performance. Gilman (2016) also echoed the same in his study which confirmed that students differed in terms of their mastery based on the attitude formed by the students on the subject. On the other hand, FG 3 in their response noted that positive conduct and commitment by students includes attending class, responding to directions given by the school authority, avoiding disruptive behaviors and following classroom rules as set by the school. These were as “In my own opinion, engagement in learning includes concentrating in class chores, making an effort to be fully involved in class activities, being persistent in your academic duties, contributing to class discussion, inquiring and answering questions in class, completing homework in time, and spending extra time on class-related learning activities” (FG 3).

The calibers of FG 3 believed that a positive relationship between behavioral involvement and academic performance seems to be more evident among academically resistant students with greater engagement in academic activities at class level. This characteristic is shared by majority of the students who were deemed to be academically resilient, according to the discussion. These were in tandem with Lee (2014) who stated that student engagement on academic performance varies depending on the components of engagement and those positive emotional reactions to tasks or people can lead to students having a sense of belonging at school hence improving on academic performance.

The results of the survey also show that, although other students’ factors equally influence academic performance, their perceived influence is high. For instance, the principals rated career choice and substance abuse as of high influence on academic performance. Students’ unrest and absenteeism from school was also established to have high influence [principals (mean=3.63). This was in concurrence with Okwakpam (2012) findings on students ‘unrest among secondary school students who indicated that there exists a significant close link between student’s unrest and discipline on learner’s academic performance. He further established that the student’s indiscipline contributes greatly to the student’s level of performance and achievements. It can be concluded therefore, that effective school discipline should be encouraged by the school administration and teachers to enhance control of students’ behaviour thus students’ general academic performance will be realised.

It also arose that participation in co-curriculum activities had some influence on academic performance. This is in agreement with the findings of Waseka and Simatwa (2016) who equally established that co-curriculum activities influence students’ academic performance. It was noted through the focus group discussion that absenteeism and students’ indiscipline has a positive correlation with academic performance. These were advanced by FG 6 and FG 1 during the discussion as “In this school, there exist a relationship between performance and school attendance. Students who are consistently absent themselves from school have been noted to perform dismally in their academics unlike the students who are always in attendance. Some parenting styles equally contribute to students’ indiscipline” (FG 6) and “Some students in this school are over protected by their parents making it hard for the teachers to control and discipline such students. Learners’ performance in this school has been low because of drug abuse by some students. There is a significant link between cannabis use by students in this school and performance including lower grade point average and poorer school performance” (FG 1). From the above point of view held by the two groups of students, it can be observed that the abuse of drugs and student’s absenteeism is directly associated with the students’ academic performance. A good academic qualification obtained by the learner without a concrete base of discipline of the student is of no meaning to the students, their families and even to the society.

In the absence of discipline, the learning and teaching process are hindered and performance is compromised. The students waste their time and the teachers and parents misdirect their energy in dealing with issues emanating from unrest and indiscipline other than on performance. Learners’ competitive spirit, Learners own set targets and Students’ discipline in schools are directed to effective use and well monitored by the school administration then students’ academic performance will improve bearing in mind that all other factors which are not predictors to academic performance will automatically rely into the three factors which have been established to be the predictors of students’ academic performance. This is in agreement with (Kambuga and Abich (2017, Okwakpam, 2012; Onyango and Simatwa, 2016; Peter, Bantu and Martin, 2016) who supported positively the significant effect of Learners’ competitive spirit, Learners own set targets and Students’ discipline in schools. Similarly, if learners’ competitive spirit and Learners own set targets are improved among students then students’ ambition, learners’ individual

effort, learners' attitude on subjects, career choice and lack of learners' ambition and participation in co-curriculum activities will automatically be induced to improve students' academic performance. Students' discipline allows students to do the right thing always hence lead to their academic improvement. By comparing the literatures, new knowledge is that among other students' factors, only three (Learners' competitive spirit, Learners own set targets and Students' discipline in schools) can predict students' academic performance. This knowledge gap was not specified by all the literatures reviewed.

Conclusion

The regression model was established to be a good fit of the data, implying that information on students' factor could be used to predict students' academic performance in public secondary schools. Specifically it was concluded that if learners' competitive spirit and learners own set targets and students disciplined in school are improved among students then students' academic performance will improve. The other factors, ambition, learners' individual effort, learners' attitude on subjects, career choice and lack of learners' ambition and participation in co-curriculum activities did not significantly influence students academic performance.

Recommendations

Directorate of quality assurance department in secondary schools should be functional to give guidance to the students on better methodology of learning. Learners need to be guided on how best they can set and achieve their targets and academic goals. The spirit of better competition and positive attitude towards learning and subjects should be inculcated into the learners by both the administration and the subject teachers to enhance academic performance by the students.

REFERENCES

- Abdulkadir, M. D., Ali, A. M., Mohamed, A. and Raqia, A. M. 2017. School Environment and Academic Performance in One of Nigerian Colleges of Education. *Malaysian Journal of Social Sciences and Humanities*, 2 1: 1-10.
- Adeyemi, T. O. 2004. Educational Administration. An Introduction. Lagos: Atlantic Associated Publishers.
- Ado, T. and SHAMAKI 2015. Influence of Learning Environment on Students' Academic Achievement in Mathematics: A Case Study of Some Selected Secondary Schools in Yobe State – Nigeria. *Journal of Education and Practice*, 634: 40-44.
- Agu, S., Nwankwo, B., Obi, T., Sydney, A., and Mgbenkemdi, H. 2013. Effect of gender and locality on alcohol abuse among secondary school students, 21: 049-053.
- Akdil Sönmez, A. and Akpınar, A. 2017. The role of physical environmental factors on university students' academic performance. *Journal of Human Sciences*, 144: 42-41.
- Akinyemi, A. O. 2009. Enhancing Students Attitude towards Nigerian Senior Secondary School Physics Through the Use of Cooperative, Competitive and Individualistic Learning Strategies. *Australian Journal of Teacher Education*, 341: 1-9.
- Ali, A., Dada, I., Isiaka, G., and Salmon, S. 2014. Types, Causes and Management of Indiscipline Acts among Secondary School Students in Shomolu Local Government Area of Lagos State. *Salmon, S.A.4*, 14, 253.
- Alokan, B. F., Osakinle, O. E. and Onijingin, O. E. 2013. The influence of Parents' education background and study facilities on academic Performance among secondary school students. *Ozean Journal of Social Science* 62:27-33.
- Altschul, I. 2016. Parental Involvement and the Academic Achievement of Mexican American Youths: What Kinds of Involvement in Youths' Education Matter Most? *Social Work Research*. 35: 159-170.
- Ambrose, K.U. 2016. School Factors Associated with Student Violence in Secondary Schools in Nandi South District, Kenya. Ph.D.
- Amponsah, M., Yaw, Milledzi, E., Twum Ampofo, E., and Gyambah, M. 2018. Relationship between Parental Involvement and Academic Performance of Senior High School Students: The Case of Ashanti Mampong Municipality of Ghana. *American Journal of Educational Research*, 61: 1-8. doi: 10.12691/education-6-1-1
- Anders, D. Olofsson, Ola, J. Lindberg, GöranFransson, 2018 "Students' voices about information and communication technology in upper secondary schools", *The International Journal of Information and Learning Technology*, Vol. 35 Issue: 2: 82-92.
- Anthonia, O. 2015. Home environmental factors affecting students' academic Performance in Abia State, Nigeria: Rural Environment. *Education*, 7: 141-149.
- Atemi, G., and Ondieki, Z. 2012. A Comparative Analysis of Drug Use and Abuse among Male and Female Secondary School Students in Kisii County, Kenya, 34: 506-513.
- Ayça, S. A., and Ali, A. T. 2017. The role of physical environmental factors on university students' academic performance. *Journal of Human Sciences*, 144: 4241.
- Ayodele, A., Jairo, Raburu, 2018. Effectiveness of Guidance and Counseling in the Management of Student behavior in Public Secondary Schools in Kenya, *International Journal of Applied Psychology*, Vol. 8 1: 6-11.
- Bada, F., and Adebisi, D.R. 2014. Alcohol Consumption Behaviour among Secondary School Students in Nigeria.4 3, 4.
- Belle, J. 2018. The Causes of a Lack of Discipline among Secondary School Learners in Mauritius. *Mediterranean Journal of Social Sciences*, 91: 35-46.
- Bigler, R. S., Averhart, C. J., and Liben, L. S. 2003. Race and the workforce: Occupational status, aspirations, and stereotyping among African American children. *Developmental Psychology*, 39, 572-580. doi: 10.1037/0012-1649.39.3.572
- Bolanle, A. O. 2017. Principals' leadership skills and school effectiveness: The case of South Western Nigeria. *World Journal of Education*, Vol. 3 5: 27-33.
- Bolu-Steve, F.N. and Oredugba, O.O. 2017. Influence of Counselling Services on Perceived Academic Performance of Secondary School Students in Lagos State. *International Journal of Instruction*, 102: 211-228.
- Buhere, P. 2007. A study of Quality of Education in Public Secondary Schools in Bungoma Division of Bungoma District. Unpublished M.ED Project, University of Nairobi
- Caño, K.J., Cape, M.G., Cardosa, J.M., Miot, C., Pitogo, G. R., Quinio, C.M., and Merin, J. 2016. *The Online Journal of New Horizons in Education*, Volume 6, 4: 143-150
- Chebukaka, R. 2014. Drug Abuse among Students in Public Secondary Schools in Kenya, the Case of Vihiga County, 43.
- Chee, Ken Nee. 2014. The Effect of Educational Networking on Students' Performance in Biology. *International Journal on Integrating Technology in Education*. 3: 21-41.

- Cheloti, S. K., Obae, R. N., and Kanori, E. N. 2014. Principals' Management Styles and Students' Unrest in Public Secondary Schools in Nairobi County, Kenya. 5.
- Chepkorir, S., Cheptonui, E. M., and Chemutai, A. 2014. The relationship between teacher-related factors and students attitudes towards secondary school chemistry subject in Bureti district, Kenya. *Journal of Technology and Science Education*, 44.
- Cheruiyot, D. K., and Simatwa, E.M.W. 2016. *Guidance and counseling services and their influence on students' academic performance in public secondary schools in Kenya: A case study of Bureti sub-county*. Retrieved from <http://www.journalera.com>
- Chevalier, A., Harmon, C., O' Sullivan, V., and Walker, I. 2013. The impact of parental income and education on the schooling of their children. *Journal of Labor Economics*, Vol. 2: 1-22.
- Chowa, G., Masa, R., and Tucker, J. 2013. The effects of parental involvement on academic Performance of Ghanaian youth: Testing measurement and relationship using structural equation modeling. *Children and Youth Services Review*, 3512: 2020-2030.
- Costa, M., and Faria, L. 2017. Parenting and Parental Involvement in Secondary School: Focus Groups with Adolescents' Parents. *Paidéia Ribeirão Preto*, 2767: 28-36.
- Creswell, J. W. 2014. *Research Design Qualitative, Quantitative and Mixed Methods Approaches* 4th ed.. Thousand Oaks, CA: Sage Publications.
- Dahie, A. M., Mohamed, A. A., and Mohamed, R. A. 2018. The Role of Parental Involvement in Student Academic Achievement: Empirical Study from Secondary Schools in Mogadishu-Somalia. 57.
- Danyal, M., Tahir, N., Ali, H., Iqra, M. 2012. The effect of co-curricular activities on the academic performances of the students: A case study of the Islamia University of Bahawalpur, Pakistan. *Bulgarian Journal of Science and Education Policy*, Vol. 62: 257-272.
- David, R. T., Susan, P. K., Terri, L. S. and Susan, D. C. 2010. Parent Involvement and Student Academic Performance: A multiple meditational analysis. *NIHPA Author Manuscripts*, 383: 183-197.
- Draft, R. L. 1999. *Leadership: Theory and Practice*. Fort Worth: Dryden Press.
- Dunham, Y., Chen, E. E., and Banaji, M.R. 2013. Two signatures of implicit intergroup attitudes developmental invariance and early enculturation. *Psychological Science*, 24: 860-868.
- Dunham, Y., Srinivasan, M., Dotsch, R., and Barner, D. 2014. Religion insulates in-group education level. Retrieved from <http://www.socialsituation.eu>
- Egbo, J. O. 2015. Guidance and Counselling: A Creativity for Promoting Sustainable Well Being and Adjustment of Secondary School Students in Nigeria. UK, *European Centre for Research Training and Development*. 3: 47-59.
- Ehiane, O.S. 2014. Discipline and Academic Performance A Study of Selected secondary Schools in Lagos, Nigeria. *International Journal of Academic Research in Progressive Education and Development*, 31.
- Ekpete, O., and Festus, C. n.d.. Improving Students' Performance and Attitude towards Chemistry through Problem-Based-Solving Techniques 11, 167-174.
- European Union Monitoring Report 2013. Students performance and parents Evaluations: the development of intergroup attitudes in India. *Developmental Science*, 17: 311-319. doi: 10.1111/desc.12105.
- Evangel Publishing House. Pierce, E. and Hansen, S. 2008. ICIS 2008 Proceedings.
- Fajoju, S. A., Ojugo, A., & Aluede, O. 2015. Parental involvement as a correlate of academic achievement of primary school pupils in Edo State, Nigeria 1st ed., Vol. 95.
- Farooq, M.S., Chaudhry, A.H., Shafiq, M. and Berhanu G. 2011 Factors Affecting Students' Quality of Academic Performance: A Case of Secondary School Level. *Journal of Quality and Technology Management*, vii ii, 01-14.
- Fraenkel, J. R. and Wallen, N. E. 2009. *How to Design and Evaluate Research in Education* 7th ed.. New York: McGraw-hill.
- Fujita, K. 2018. The Effects of Extracurricular Activities on the Academic Performance of Junior High Students. Retrieved from <http://www.kon.org/urc/v5/fujita.html>
- Gatua, D. M., Sindabi, A. M., & Chepchieng, M. C. 2015. Impact of Guidance and Counseling Services on Students' Behaviour Modification between Selected Public Urban and Rural Secondary Schools in Rift Valley Province, Kenya. 5: 28-40.
- Ghysens, L. 2009. Parents,' teachers' and children's perception of parental involvement in relation with pupils' learning achievement and wellbeing.
- Gitome, J.W., Katola, M.T. and Nyabwari, B.G. 2013. Correlation between students' discipline and performance in the Kenya Certificate of Secondary Education. *International Journal of Education and Research*, 18: 1-10.
- Glanz, J. 2000. Paradigm debates in curriculum and supervision: Modern and postmodern perspectives. Westport, CT: Bergin and Garvey.
- Gravetter, F. J. and Wallnau, L. B. 2000. *Statistics for the behavioral sciences* 5th edn Belmont, CA: Wadsworth.
- Groups with wealth: Evidence from South Africa. *Child Development*, 83: 1884-1899.
- Haruna, R., Aisha, M. I., Umaru, Y., and Tukur, H. A. 2016. Impact of Mobile Phone Usage on Academic Performance among Secondary School Students in Taraba State, Nigeria. *European Scientific Journal*, 121
- Hasnat, M. A. 2016. Parents Perception of Their Involvement in Schooling Activities: A Case Study from Rural Secondary Schools in Bangladesh. *Studio Pedagogical*, 214: 137-149
- Hill, N. E., and Tyson, D. F. 2009. Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 453: 740-763.
- Hill, P. 2006. *Put learning first: A portfolio approach to public schools*. Washington, DC: Progressive.
- Horwitz, S. R., Shutts, K., and Olson, K. R. 2014. Social class differences produce social group preferences. *Developmental science*, 17, 91-1002. doi: 10.1111/desc.12181 <http://www.unicef.org>
- Ifeoma, O. J., Chinyere, A. S., Efeiyadu, U. H., and A, A. J. 2017. Perceived factors influencing academic performance of students in accounting in secondary schools in Anambra State. *IOSR Journal of Humanities and Social Science*, 222: 96-99.
- Ilomo, O., and Mlavi, B. 2016. The Availability of Teaching and Learning Facilities and Their Effects on Academic Performance in Ward Secondary Schools in Muheza – Tanzania. 46.

- Irfan, M. and Shabana, N.K. M. A. 2012. Factors Affecting Students' Academic Performance. *Global Journal of Management and Business Research*, 129: 2249-4588
- Jackline, T. N. and John, A. O. 2014. School Management and Students' Academic Performance: How Effective are Strategies being employed by School Managers in Secondary Schools in Embu North District, Embu County, Kenya. *International Journal of Humanities and Social Science*, 49,
- James, D. 2009. Effects of leadership styles and student academic achievement.
- Jepkoech, S. 2002. A survey of factors that influence the performance of students in Economics in KCSE: A Case of selected schools in Rift Valley Province of Kenya. Unpublished M.Phil. Thesis. *Moi University*, Eldoret, Kenya.86.
- Jerome, K. M. 2015. Influence of Home Environment on Academic Performance of Students in Public Secondary Schools in Kitui West Sub County, Kitui County, Kenya. 1-104.
- Jinot, B.L. 2018. The Causes of a Lack of Discipline among Secondary School Learners in Mauritius. *Mediterranean Journal of Social Sciences*, 91: 35-46.
- John, A., and Jackline, T. O. 2014. School management and students' academic performance: How effective are strategies being employed by school managers in secondary schools in Embu North District, Embu County, Kenya?
- John, M.M., Jackson, T. and Catherine, S. 2015. Effect of Students' Age on Academic Motivation and Academic Performance among High School Students in Kenya. *Asian Journal of Education and e-Learning*, 35: 2321-2454.
- Joseph, O., Yeboah-Appiagyeyi, K., &Fentim, D. B. 2014. The School Environmental Factors that Affect the Academic Performance of Senior High Financial Accounting Students in Tamale Metropolis in the Northern Region of Ghana. *Advances in Social Sciences Research Journal*, 17: 133-144.
- Josephine, N. M., Damaris P. &Patriciah W.W. 2015. Influence of Parents Economic Status on Girls' Academic Performance in Mixed Day Secondary Schools. *American Journal of Educational Research* Vol. 311: 1359-1363.
- Kamau, M. L. 2013. Relationship between Family Background and Academic Performance of Secondary Schools Students: A Case of Siakago Division, Mbeere North District, Kenya. *Educational Effectiveness*, 63: 199-222.
- Kambuga, Y., and Omollo, A. 2017. Understanding Students' Leadership Role and Challenges in Secondary Schools in Tanzania. *Asian Research Journal of Arts and Social Sciences*, 23.
- Kamore, S. K., and Tiego, P.M. 2013. What Hinders Guidance and Counselling Effectiveness in Enhancing Discipline in High Schools in Murang'a County, Kenya.
- Kapelinyang, R.P. and Lumumba, K.P. 2017. Determinants of Academic Performance in Public Secondary Schools in Kapenguria Division-Kenya: Assessing the effect of participation in selected Co-Curricular activities. *African Journal of Education, Science and Technology*, Vol.4, 2:164-174.
- Kasamo, D. 2006. Research methods in humanities and education. Egerton: Egerton.
- Kavutha, M. J. 2015. Influence of Drug Use on Academic Performance among Secondary School Students in Matinyani District, Kenya. 511: 726-731.
- Kenneth Leithwood, Karen Seashore Louis, Stephen Anderson, Kyla Wahlstrom, 2004. Review of Research: How Leadership Influences Student Learning, University of Minnesota and University of Toronto, 24.
- Kenya National Bureau of Statistics. 2010. Population Census Result of Kenya by Year 2009. Nairobi, Government Printer: Kenya.
- Khan, R.M.A., and Tasneem, N.I.S. 2015. The influence of Parents Educational level on Secondary School Students Academic achievements in District Rajanpur. *Journal of Education and Practice*, Vol.6 16: 143-150.
- Kiplagat, W. S., and MUGASIA, F. A. 2014. School Factors Associated with Student Violence in Secondary Schools in Nandi South District, Kenya. 41: 123-132.
- Kochamba, D.M., and Murray, R.K. 2010. Principals' and teachers' perception of leadership skills. Retrieved from <http://74.125.155.132/scholar?qodgJ:scholar.google.com/+kochomba+and+murray&hl=en&as-sdt=10,5,nationaforum.co>
- Kolo, A. G., Wan, Jaafar, W. M., and Ahmad, N. 2018. Influence of Psychosocial Factors on Student's Academic Performance in One of Nigerian Colleges of Education, 21:1-10.
- Korir, D.K. 2016. The Impact of School Environment and Peer Influences on Students' Academic Performance in Vihiga County, Kenya. 45.
- Kothari, C.R. 2004. Research Methodology: Methods and Techniques, Second Edition, New Age International Publishers.
- Kouzer, J. and Posner.B. 2007. The Leadership Challenge. An Imprint of Wiley: Jossey-Bass.
- Kraft, M. A., and Dougherty, S. M. 2013. The effect of teacher-family communication on Student engagement: Evidence from a randomized field experiment. *Journal of Research on Educational Effectiveness*, 63: 199-222.
- Krejcie, R. and Morgan, D. 1970. Determining Sample Size for Research Activities. *Educational and Psychological Measurement*. An electronic Journal for the 21st Century. Available at: <http://www.emoderators.com/ipct-j/1998/n3-4/hill.html>
- Law, S., and Glover, D. 2000. Educational leadership and learning Practice, policy and research. Philadelphia: Open University Press.
- Lee, J.S. 2014. The relationship between student engagement and academic performance: Is it a myth or reality? *The Journal of Educational Research*, 1073: 177-185.
- M Al-Musa, H., and Al-Montashri, S. S. 2016. Substance abuse among male secondary school students in Abha City, Saudi Arabia: Prevalence and associated factors. 274.
- Makau, N., Ronoh, A., &Tanui, E. 2016. Relationship between Principals' Instructional Supervision and Students' Academic Achievement in Sciences in Secondary Schools, 79.
- Manson, M. 2010. Sample Size and Saturation in PhD Studies Using Qualitative Interviews, in Forum Qualitative Special for SC hung/Forum. *Qualitative Social Research*11, 3.
- Marangu, P. G., Dr., Bururia, D. N., Dr., and Njonge, S. T. 2012. Challenges Faced By Peer Counsellors in Their Effort to Effect Behavior Change in Secondary Schools in Maara District, Kenya. 2.
- Marquardt, M.J. 2012. Building the Learning Organization; Achieving Strategic Advantage through a Commitment to Learning 3rd Ed.. Nicholas Brealey Publishing: Boston, USA.

- Mary, K. 2015. Influence of Drug Use on Academic Performance among Secondary School Students in Matinyani District, Kenya, 511: 2250-3153.
- Masoumeh, P. and Muhammad, F. G. 2016. Four-Frame Leadership and Students' Academic Achievement. *FWU Journal of Social Sciences*, 101: 123-134
- Mata, M. D., Monteiro, V., & Peixoto, F. 2012. Attitudes towards Mathematics: Effects of Individual, Motivational, and Social Support Factors. *Child Development Research*, 2012:1-10.
- Maxwell, S., Reynolds, K. J., Lee, E., Subasic, E., and Bromhead, D. 2017. The Impact of School Climate and School Identification on Academic Achievement: Multilevel Modelling with Student and Teacher Data. *Frontiers in Psychology*, 8, 2069.
- McGregor, D. 1960. Theory X and theory Y. *Organization theory*, 358-374.
- Micheal, D., Babatola, J., and Olabisi, R. 2016. Principals' Administrative Strategies. Model for Educational Reform. Retrieved from <https://files.eric.ed.gov/fulltext/ED375485.pdf>
- Ministry of Education, 1993. Report of a Conference on Educational Administration, Nairobi; Jomo Kenyatta Foundation.
- Modo, F., Uwah, C., and Mogbo, I. 2013. Guidance and Counseling Services in Secondary School as Coping Strategy for Improved Academic Performance of Students in Akwalbom State, Nigeria, 3, 4th ser.
- Monishankar, P. and Christine G. 2017. How to conduct a successful focus group discussion. Singapore, University of Chicago.
- Moswela, B. 2014. Students' Academic Achievement: Whose Responsibility and Accountability? *International Journal of Business and Social Science Vol. 5*, 10: 47-57.
- Mudassir, I. U., and Norsuhaily, A. B. 2015. The Influence of School Environment on Academic Performance of Secondary School Students in Kuala Terengganu, Malaysia. 252-256.
- Mugenda, O. M., and Mugenda, A.G. 2003. *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: African Centre for Technology Studies Press.
- Muusya, J. K. and Mary, K. 2015. Influence of Drug Use on Academic Performance among Secondary School Students in Matinyani District, Kenya. *International Journal of Scientific and Research Publications*, 511: 2250-3153. Mazola Publishers.
- Nakitende, A. J., Bangirana, P., Nakasujja, N., Semrud-Clikeman, M. E., Ssemata, A. S., John, C. C., and Idro, R. 2018. "I feel so bad but have nothing to do." Exploring Ugandan caregivers' experiences of parenting a child with severe malaria and subsequent repeated uncomplicated malaria 11 Medical and Health Sciences 1117 Public Health and Health Services 17 Psychology and Cognitive Sciences 1701 Psychology. **Malaria Journal**, 171, [360].
- Nandeke, E., Chumba, S. K., and Kiprop, C. 2017. Rethinking of Public Secondary Schools Discipline in Kenya. *European Scientific Journal*, 13 19.
- Ndirangu, P. 2007. An investigation of the relationship between test anxiety and academic performance in secondary schools in Nyeri district, Kenya. Nakuru. Egerton University.
- Newheiser, A. K., Dunham, Y., Merrill, A., Hoosain, L., and Olson, K. R. 2014. Preference for high status predicts implicit out-group bias among children from low-status groups. *Developmental Psychology*, 50, 1081.
- Njagi, L.W. 2013. Teacher Factors Influencing Students' Academic Achievement in Secondary Schools. *International Journal of Education and Research*, 13: 1-14.
- Nsa, S. O., Dr., Offiong, A. A., Dr., Udo, M. F., and Ikot, A. S. 2014. School Environmental Variables and Students Academic Performance in Agricultural Science. 163-167.
- Gilman, N. 2016. Students' Attitudes and English Language Performance in Secondary Schools in Tanzania. *International Journal of Learning, Teaching and Educational Research*. 15: 117-133
- Nyamwange, C.B., Nyakan, P.O., and Ondima, P. C. 2012. Assessment of Challenges facing Secondary School Guidance and Counseling Teachers in Nyamira District, Kenya. 16th ed., Vol. 3.
- Odeh, R., Oguche, O., and Ivagher, E. 2015. Influence of School Environment On Academic Achievement Of Student in Secondary Schools In Zone A Senatorial District Of Benue State, Nigeria. *International Journal of Recent Scientific Research*, 67: 4914-4922.
- Odigwe, F., and Eluwa, I. 2013. Appraising the State of Maintenance and Management of Available Secondary School Facilities on Students' Academic Performance in Cross River State, Nigeria. 424: 101-105
- Ofoebgu, F.I. 2004. Teacher motivation: A factor for classroom effectiveness and school improvement in Nigeria. *College Student Journal*, Vol.38, 1, pp. <https://www.questia.com/library/journal/1G1-115034778>.
- Ogwari, R., Simiyu, C. and Kindiki, J. 2014. The Influence of Reciprocal Interactions in the Family on Academic Performance among Secondary School Students in Kenya. *Journal of Arts and Humanities*, 37: 776-787.
- Ojukwu, M. 2017. Effect of Insecurity of School Environment on the Academic Performance of Secondary School Students in Imo State. 51, 20-28. 51-55.
- Olayinka, A.A., and Olufemi, A. S. 2017. Olayinka, A. A., and Olufemi, A. S. 2017. School Size and Facilities Utilization as Correlates of Secondary School Students' Academic Performance in Ekiti State, Nigeria. 21.
- Oluremi Ph.D., F. 2013. Principals Organizational Management and Students' Academic Achievement in Secondary Schools in Ekitistate Nigeria, 22: 78-84.
- Oluremi, D. 2011. Attitude of regular students and academic performance of students with special needs in integrated setting 4th Ed..
- Omotade, A., Funke, A., and Oyewumi, F.A. 2016. Students' attitude and interest as correlates of students' academic performance in biology in senior secondary school. *International journal for innovation education and research*, 43: 2349-2244.
- Onukwo, G. 2004/2005. Class note on educational psychology, in PGDI education Ed.
- Onyango, D. O., Simatwa, E. M. W., and Gogo, J. O. 2016. Influence of Mental Harassment Ban on Student Discipline in Secondary Schools in Kenya: A Case Study of Ugenya, Gem and Siaya Sub-Counties. *Greener Journal of Educational Research*, 63: 133-1
- Onyara, N. B. 2013. School Based Factors Influencing Student's Academic Performance at Kenya Certificate of Secondary Education in Teso South District.
- Oppenheim, A. N. 1992. Questionnaire design, interviewing and attitude measurement New Ed.. London: Printer.
- Orlu, C. 2013. Environmental Influence on Academic Performance of Secondary School
- Orodho, A. J. 2003. *Essentials of Education and Social Science Research Methods*. Nairobi: Mazola Publishers.

- Orodho, J. 2009. *Elements of Education and Social Sciences, Research Methods*, 2nd Edition, Maseno: Kenezja Publishers.
- Osei-Tutu, Joseph & Yeboah-Appiagyei, Kate and Fentim Darkwa, Bernard. 2014. The School Environmental Factors That Affect the Academic Performance of Senior High Financial Accounting Students In Tamale Metropolis in The Northern Region of Ghana. *Advances in Social Sciences Research Journal*. 1: 133-144.
- Oso, W.Y., and Onen, D. 2009. *A General Guide to writing research proposal and report: A handbook for beginning researchers*. Nairobi: Jomo Kenyatta Foundation.
- Otieno O.D., Simatwa, E.M.W., and Gogo, J.O. 2016. Influence of Mental Harassment Ban on Student Discipline in Secondary Schools in Kenya: A Case Study of Ugenya, Gem and Siaya Sub-Counties. *Greener Journal of Educational Research*. 6: 133-150.
- Paul, O. N., Pamela, R. and Peter, J. O. A. 2016. Influence of Learner Reflection on Academic Performance of Kenyan Secondary School Students. *International Journal of Psychology and Behavioral Sciences*, 63: 128-132.
- Peter, B. N. 2016. Analysis of Family Structure Influence on Academic Performance among Secondary School Students in Bungoma East Sub-County, Kenya. *International Journal of Secondary Education*. 42: 12-22.
- Peter, O.O. 2016. Student Factors Related to Mathematics Achievement of Public Secondary School Students of Masaba South Sub County, Kenya: A Qualitative Study. *Baraton Interdisciplinary Research Journal*, 6Special Issue, 106-110.
- Pierce, E., and Hansen, S. 2008. ICIS 2008 Proceedings Punjab Bureau of Statistics 2008. Government of Punjab, Lahore
- Rafiq, H.M.W., Fatima, T., Sohail, M. M., Saleem, M., and Khan, M. A. 2015. Parental involvement and academic achievement; A study on secondary school students of Lahore, Pakistan. *International Journal of Humanities and Social Science, Vol. 3* 8: 211-225.
- Ralph, B. and McNeal, J. 2014. Parent Involvement, Academic Achievement and the Role of Student Attitudes and Behaviors as Mediators. *Universal Journal of Educational Research*, 28: 564-576.
- Rebecca, K. and Michael, B. 2012. Student Indiscipline and Academic Performance in Public Secondary Schools in Kenya. Working Paper Series Number DU/ 2012/002.
- Richlin, L. and Cox, M. 2004. Developing scholarly teaching and the scholarship of teaching and learning through faculty learning communities. *New Directions for Teaching and Learning*, 200497:127-135.
- Ritchie, and Gail, M. 2018. The Impact of Academic Co-Curricular Activity Participation on Academic Achievement: A Study of Catholic High School Students, Seton Hall University dissertation and Theses TDs. 2494. <https://scholarship.shu.edu/dissertations/2494>.
- Robinson, K., and Harris, A. L. 2016. A New Framework for Understanding Parental Involvement: Setting the Stage for Academic Success. 186-201.
- Ross, J. A. and Gray, P. 2006b. Transformational leadership and teacher commitment to organizational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 172: 179-199.
- Ruirie, P.K., Kimosop, M., and Kagema, J. 2017. The Use of Alternative Methods of Enforcing Learners' Discipline in Primary Schools in Nyeri Central Sub-County, Kenya, 208-224.
- Salome, C., Edna, M. C. and Agnes, C. 2014. The Relationship between Teacher-Related Factors and Students' Attitudes towards Secondary School Chemistry Subject in Bureti District, Kenya. *Journal of Technology and Science Education*, 44: 228
- Sarantakos, S. 2005. *Social Research*. 3rd ed.. Melbourne: Macmillan Education.
- Sashkin, M., and Sashkin, M. G. 2003. Leadership that matters. Secondary Schools and Students' Academic Performance. *International Journal of Academic Research in Business and Social Sciences*, 57: 2222-6990.
- Semali, L. and Vumilia, P. 2016. Challenges Facing Teachers' Attempts to Enhance Learners' Discipline in Tanzania's Secondary Schools. *World Journal of Education*, 61:50-67.
- Sergiovanni, T. and Starratt, R. 2002. *Supervision: A Redefinition* 7th ed.. New York: McGraw Hill.
- Sergon, D. 2005, October 6. School Success Depends on the Head Teacher's Ability. *The Standard*. Nairobi: The Standard Group.
- Shaw, S.R., Gomes, P., Polotskaia, A., and Jankowska, A. M. 2015. The relationship between student health and academic performance: Implications for school psychologists. *School Psychology International*, 362: 115-134.
- Shoukat, A, Ilyas, M, Azam, R, and HuSub Sahara Africa in, A. 2012. Impact of Parents' Education on Children's Academic Performance. *Secondary Education Journal* Vol. 2, No. 1:53-59.
- Simuforosa, M. 2013. The impact of modern technology on the educational attainment of adolescents. 19. Students in Port Harcourt Local Government Area of Rivers State. *Journal of Economics and Sustainable Development*, 412: 2222-2855
- Siringi, S. 2010, March 3. KCSE: Year of the boys.
- Sombor, Vojvodina, and Serbia 2014. Individual and Social Factors Related to Students 'Academic Achievement and Motivation for Learning. *Suvremenapsihologija*, 171: 63-79.
- Stanley, E. O. 2014. Discipline and Academic Performance A Study of Selected secondary Schools in Lagos, Nigeria. *Discipline and Academic Performance A Study of Selected Secondary Schools in Lagos, Nigeria*, 3, 181-194.
- Stewart, D. W. and Shamdasani, P. N. 1990. 'The focus group moderator'. In D. W. Stuart and P. N. Shamdasani, *Focus Groups: Theory and Practice*, Newbury Park, Calif.: Sage, Ch 4: 69-85.
- Suleiman, A. Y. 2015. Leadership Styles, Types and Students' Academic Achievement in Nigeria. University Tun Hussein Onn Malaysia.
- Suleiman, B., Mustapha, B. I. and Ibrahim, B. B. 2016. Principals' Administrative Styles and Students' Academic Performance in Taraba State Secondary Schools, *Nigeria. Journal of Education and Practice*, 718: 1-7
- Sunday Owoeye, J. and Olatunde, Yara, P. 2011. Class Size and Academic Achievement of Secondary School in Ekiti State, Nigeria. *Asian Social Science*, 76:1-85.
- Thakur, D.N. and Thakur, D. 2004. *Educational Planning and Administration*. 2nd edition.
- UNESCO. 2015. Education for all 2000-2015: Challenges and opportunities.
- United Nations. 2015. Millennium Development Goals report. University of Nairobi. University Press
- Usaini, M. I., and Bakar, N. A. 2015. The Influence of School Environment on Academic Performance of Secondary School Students in Kuala Terengganu, Malaysia. 252-261.

- Wabuke, J. M. 2013. The Role of Student-Related Factors in the Performance of Biology Subject in Secondary Schools in Eldoret Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies*, 41, 64-73.
- Wako, A. 2016. The Status of Utilization of School Guidance and Counseling Services in Ethiopian Secondary Schools in Addressing the Psychosocial and Academic Needs of Secondary School Students: The Case of Sidama Zone, SNNPRSal of Humanities and Social Science. *IOSR Journal of Humanities and Social Science*, 212: 27 - 35.
- Wambui, A. 2015. Effectiveness of Guidance and Counseling Services in Secondary Schools in Kenya: A Case Study of Githunguri Sub-County in Kiambu County. 1, 2004-2009.
- Wammula, A. J. 2013. Factors influencing academic performance in Kenya.
- Wanjohi, A. M. 2015. Teacher and Parental Factors Influencing Students' Academic Achievement: Kenya's Private Secondary School Context. *African Research Journal of Education and Social Sciences*, 12: 2312-0134
- Waseka, L.E. and Simatwa, E.M.W. 2016. Student Factors Influencing Academic Performance of Students in Secondary Education in Kenya: A Case Study of Kakamega County. *International Research Journals*, 73: 072-087.
- Waswa, N.N. 2017. Impact of Principals' Communication skills on students' academic performance in Kenya. *International Journal of Innovative Research and Advanced Studies Vol. 42*: 187-191.
- Weintraub, D.S., and Sax, L.J. 2018. The Relationship between Student-Parent Communication and First-Year Academic Performance. *NACADA Journal*, 381: 61-76.
- Whiting, S.W., Podsakoff, P. M., and Pierce, J. R. 2008. Effects of task performance, helping, voice, and organizational loyalty on performance appraisal ratings. *Journal of Applied Psychology*, 931: 125.
- Wijisman, L. A., Warrens, M. J., Saab, N., van Driel, J. H., and Westenberg, P. M. 2016. Declining trends in student performance in lower secondary education. *Europeans Journal of Psychology of Education*, 314: 595-612.
