GLOBAL JOURNAL OF ADVANCED RESEARCH
(Scholarly Peer Review Publishing System)

RELATIONSHIP BETWEEN ACADEMIC MOTIVATION AND ACADEMIC PERFORMANCE IN PUBLIC SECONDARY OF SECONDARY SCHOOL STUDENTS IN NAIROBI COUNTY, KENYA

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ABSTRACT

Students' motivation is an essential component that plays an active role in their learning. Education is an important pillar in the realization of economic goals yet an analysis of academic performance in Kenya Certificate of Secondary Education (KCSE) exhibited a declining trend. This poses a threat to students' self-realization of career goals and the Country's manpower.   This study investigated the relationship between academic motivation and academic performance of students in public secondary schools in Nairobi County. The study employed Self-Determination Theory by Ryan and Deci and the Social Cognitive theory by Albert Bandura. The Academic Motivation Scale, a high school version was adapted to measure academic motivation. The study adopted a correlation research design. Questionnaires were administered to provide quantitative data using a sample of 397 form four students drawn from 12 public secondary schools in Nairobi County. The data was analyzed qualitatively and quantitatively, guided by the study objectives. Product Moment Correlation Coefficient statistic   test was used to establish the relationship between academic motivation and academic performance of the students. The level of significance in rejecting the null hypothesis was at $p = \leq .05$. The study found a significant and positive relationship between students' academic motivation and academic performance $((r\ (318) = 0.22, P < 0.05)$. The study concluded that academic motivation is a real phenomenon that affected students' academic performance. A major implication and recommendation of the study was that all stakeholders in education develop various strategies including counseling approaches that enhances students' academic motivation with more emphasis on the boy child.

Key Words: Motivation, Intrinsic Motivation, Extrinsic Motivation and Amotivation.

1.   INTRODUCTION

Motivation which is a hypothetical psychological construct is responsible for the initiation, intensity, maintenance and persistence of behavior aimed at a goal (Hakan & Munire, 2014; Vosh & Schauble, 2014; Usher,2018.) It refers to the reasons underlying behavior (Vosh & Schauble, 2014). Motivational beliefs of the students are therefore key determinants of academic performance which is a fundamental element of education (Deci, Vallerand, Pelletier, Ryan, 1991). Academic motivation is one of the most studied concept in education for it help to determine the extent to which a student will consider value, put effort and show interest in academic tasks (Litalien, Guay, & Morin, 2015; Sinan & Jongur, 2016; Dogan, 2015). Indeed, the importance of academic motivation in academic performance have been revealed in studies among students of different cultural background and at various stages of their academic development (Simzar et al., 2015; Gupta & Rasmi, 2017; Gupta & Rasmi, 2017; Smith et al., (2018). Consequently, motivation is seen as a pre-requisite of

academic engagement and outcome and has received much conceptual and empirical focus yet cases of high school students exhibiting lack of willingness to perform the academic tasks are rampant, leading to decline in performance.

Human beings have natural and innate need to develop through a process of engagement and interaction with the world and tend to be self-driven toward greater consistency and harmony within (Dec i& Ryan, 1985). This is clearly seen in infants who are naturally known to be motivated to study the world around them. Various studies have confirmed that students, as they go through school, lose their motivation to learn school subjects leading to disengagement, underachievement and dropping out of school (Rowell & Hong, 2013; Vosh & Schauble, 2014; Badura, 1986).

In Self-Determination Theory (Deci & Ryan, 1992) the individual's self-determination is affected by the extent to which a person's fundamental and psychological needs for competence, autonomy, and relatedness are fulfilled or satisfied. Competence reflects how a person's behavior is operative and how a person feels that he or she has sufficient ability. Autonomy, on the other hand, represents a person's need to be the initiator of his or her behavior and to control that behavior. The need for relatedness reveals the necessity to feel a safe sense of belonging or connectedness to others. If these needs of autonomy, competence, and relatedness are met, they have a positive outcome on a person's well-being and quality of motivation (Deci & Ryan, 2000).

People vary not only in levels and orientation of motivation due to personality orientations, activities and situations. Therefore intrinsic motivation is distinguished further into tripartite model of intrinsic motivation to know, to accomplish, and to experience stimulation (Vallerand et al., (1992) and experiencing one type of IM over the others depends in part on people's personality styles.

Owing to the importance of academic motivation in academic performance, it is recommended that education stakeholders develop strategies on how to facilitate both extrinsic and intrinsic motivations of the students and manage the balance between them whereby the students receive initial external rewards in order to increase their interests in subjects they are least interested in and over time, they might just grow their intrinsic motivation surrounding that subject Tarver, (2018). Also students cannot be interested in a task if they are not aware of the purpose it serves in learning. It is therefore recommended that clear goals and aims should be set in their learning task to further cultivate the interest of students towards their academic pursuits. Extrinsic motivation helps students become driven and competitive, while intrinsic motivation supports seeking knowledge for its own sake. Ultimately, fostering both types of motivation helps students enhance academic performance.

A local study by Kariuki and Mbugua (2018) and Mugo and Kibera (2014) in Kirinyaga and Laikipia respectively emphasized the importance of motivation in enhancing academic performance of the students while a recent study by Nyakundi, Raburu, and Okwara (2019) found teachers' motivation influences the standard 8 students' academic performance. Furthermore, a study by Ketero and Kangangi. (2019) indicated that the school resources are a major influence of the students' academic performance. A study by (Mwiteleli, 2015) in County revealed that academic motivation and self-regulated learning are factors affecting the students' academic performance. The relationships between the variables of students' academic motivation and academic performance have not been adequately studied and yet academic motivation could promote or hinder the students' academic performance. Therefore there was need for the current in an urban setting in order to compare cross-geographical differences and similarities.

The education system in Kenya has been placing emphasis on performance as being a critical part of quality education towards the realization of the vision 2030. Performance in K.C.S.E. determines whether students will proceed to university or other tertiary institutions and the quality of courses one is admitted.

Research Problem

Academic performance in this study is an indicator of the extent to which secondary schools' students attain the Universities cut-off grade which is C+ and above. Nairobi County has witnessed a steady decline in educational standards over the last 4 consecutive years (Appendix D). In 2009, 2010 and 2011 K.C.S.E statistics indicates that, out of the maximum 12 points, the Nairobi County combined mean score was approximately six which is the equivalent to a mean grade of C (KNEC, 2017). Accordingly, 2013, 2014, 2015, 2016 and 2017 K.C.S.E statistics shows that out of the maximum 12 points, the Nairobi County combined mean score was declined to 5 which is the equivalent to a mean grade of D+ (KNEC, 2017). In 2016 and 2017, the mean grade fell further to 3.98 (D- grade) and 3.65(D-grade) respectively. This consistent failure constitute to wastage of opportunities and resources for the individuals and the country at large despite the fact that most schools in Nairobi are well equipped with adequate educational infrastructure, human resources and technological services (elimuonline.com, 2014). Thus, a study that looks into the factors associated with academic performance is crucial at this point in time. Therefore, the present study was designed to investigate the relationship between academic motivation and academic performance which is not adequately addressed in Nairobi County.

The objective of the study was to investigate the relationship between academic motivation and academic performance.

2.   METHODOLOGY

This study adopted the ex post facto- correlational design. Correlation involves collecting data in order to determine strength and direction of a relationship between two or more quantifiable variables. The degree of this relationship is expressed in correlation-coefficient (Mugenda &Mugenda, 2003). This design is useful in trying to make prediction about a behavior and open up new lines of research.

The respondents were drawn from the accessible population of form four students' from12 out of 84 public secondary schools who were registered to sit for KCSE, 2017 by Kenya National Examination Council (KNEC). This represents 14 % of the total numbers of public secondary schools in Nairobi County which is considered enough in social science study which recommend a minimum of 10% (Gay, 1981). The sample consisted of 397 participants was obtained through simple random sampling (and stratified sampling for mixed schools) procedures using Yamane (1967) formula for determining a sample size.

The Yamane formula is stated as:
 n = N/1+N (e) 2Where n is the corrected sample size, N is the population size and e (0.05) is the desired level of precision (margin of error). A 95% level of confidence is assumed. Calculation of sample size was done as follows;   n = 26477/ 1 + (264778*.0025) = 394. The sample for the current study (397) is slightly more than the one recommended by Yamane (1967). The questionnaires and document analysis were used as the main research instruments to collect data from the students. According to Orodho (2004) questionnaires are commonly used to collect important information from any given population.

2.1 Analysis of the Findings

Both qualitative and quantitative data were obtained from the questionnaire which were then scored and coded for statistical analysis by the computer using Statistical Packages for Social Sciences – SPSS – software. Qualitative data was thematically analyzed and quantitative data was coded in variable view window of SPSS.

3.   RESEARCH FINDINGS

Academic performance was the dependent variable which was measured using the KCSE, 2017 examination results which was classified into high (Between B and above),   average/ moderate (between B- -C-)   and low level (D grade and below). Academic motivation of the participants was the independent variable, which was measured using Academic Motivation Scale (AMS) High School version developed by Vallerand, et al., (1992) which adapted to suit the Kenya society The AMS is based on self-determination theory (SDT), a human motivation theory concentrating on individuals' motivation-related qualities and motives regulating their behavior.

A high score on a subscale indicated high endorsement of that particular type of academic motivation. The scores yielded were then correlated with KSCE exam scores.

Table 1: Description of students' academic motivation

Descriptive Statistics	N	Min	Max	Mean	Sd	Sk	Sd. Err
Academic Motivation Score	320	-7.13	15.00	7.3591	4.28287	-.788	.136
Valid N (listwise)	320						

Note. min = minimum; max = maximum; Sd = standard deviation; Sd Err= standard Error;
Sk= skewness.

The respondents' academic motivation score was categorized further into the low, average and high level of academic motivation as follows: -18 to -7, -6 to 6 and 7 – 18 respectively. The results are shown in Table 2

Table 2: The Respondents' Levels of Academic Performance

Levels of academic Motivation		Frequency	Percent (%)
Valid	Low	224	56.4
	Average	123	31.0
	High	50	12.6
	Total	397	100.0

Table 2 indicate that a majority or more than half of the total respondents (224, 56%) got low grades in 2017 KCSE performance (D+ grade and below). This was followed by 123(31%) students with average performance (B- - C grades). Only 50 (12.6%) students achieved high grades which (B grade and above) which guarantees one for admission into the prestigious courses in the universities.

In terms of the students' residential status, boarding school students showed a slightly higher academic motivation mean of 7.48 (166) than day scholars with 7.23 (154). This indicates that residential status of students has little impact on academic motivation. This could also imply that intrinsic motivation is likely to influence academic motivation more than extrinsic or contextual factors. Intrinsic motivation is derived out of genuine interest in an activity. Extrinsic motivation is derived out of an expected gain or a separable outcome. When a student is intrinsically motivated, they are less likely to be deterred by factors such as peer pressure, complacency or indecisiveness (Fabien, 2015). According to Bandura (1977), when a person is intrinsically motivated or possesses self-efficacy skills, he or she believes in his or her ability to organize and execute a plan of action that may be required to solve a problem. Description of students' academic motivation domains are shown in Table 3

Table 3: Description of students' academic motivation domains

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.123	.930		4.432	.000
	IMk Mean	-.054	.144	-.028	-.374	.709
	IMa Mean	.089	.184	.042	.486	.628
	IMs Mean	-.082	.123	-.046	-.665	.507
	EMi Mean	-.027	.167	-.013	-.163	.870
	EMij Mean	.969	.248	.353	3.911	.000
	EMer Mean	-.343	.132	-.190	-2.607	.010
	Amo Mean	-.524	.136	-.247	-3.843	.000

Dependent Variable: Academic performance

Table 3: Description of Academic Motivation Domains

Note. Resultant equation

AcP = 4.12 + 0.35EMItr -0.19 EME – 0.25AMT Radj=0.09, P< 0.05

Key: IMk = Intrinsic Motivation to know; IMa = Intrinsic Motivation orientation towards achievement; IMs = Intrinsic motivation towards stimulating experiences; EMi = Extrinsic Motivation identified regulation; Emir = Extrinsic Motivation introjected regulation; EMer = Extrinsic Motivation external regulation; Amo; Amotivation; M = mean; SD= standard deviation.

The results showed that there was a significant and positive relationship between academic motivation and academic performance of students in public secondary schools in Nairobi County (r (318) = 0.22, P< 0.05). The null hypothesis was therefore rejected.

4.   CONCLUSIONS

The results showed that there was a significant and positive relationship between academic motivation and academic performance of students in public secondary schools in Nairobi County (r (318) = 0.22, P< 0.05). Surprisingly, the best and significant predictor of academic performance in terms of academic motivation domains was extrinsic motivation- introjected (Beta = 0.353, t = 3.911) which is least autonomous and lowest in self-determination continuum (Deci & Ryan, 2000) because it generate controlled motivation.

The independent samples t- test provided evidence to the effect that there were significant gender differences in academic motivation (t= 3.74, df= 318, P< 0.05) in favor of females. More specifically, with regard to motivation domains, gender differences were found in favor of girls with regard to intrinsic and extrinsic motivation sub-scales except in extrinsic motivation introjected regulation where boys reported a higher mean. Further, boys ranked higher (M=9.255. SD=5.334) than girls (M=7.368, SD=4.223) in amotivation which is associated with lack of intent in learning. The study showed that gender is one of the factors that may account for differences in students' academic motivation and subsequent academic performance

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