

**DETERMINATION WHETHER THERE IS A SIGNIFICANT
RELATIONSHIP BETWEEN ACADEMIC MOTIVATION AND
ACADEMIC ACHIEVEMENT OF SECOND YEAR UNDERGRADUATE
STUDENTS IN THE FACULTY OF EDUCATION IN KISII UNIVERSITY,
KENYA.**

¹Nyagaka Nyamoita Roselyne, ¹Nyamwange Bonareri Callen

¹KISII UNIVERSTIY

ABSTRACT

There has been a global concern on the quality of University graduates in the recent years. In Kenya, the academic achievement among undergraduate students in Universities has been reported to be deteriorating. The factors that lead to this are not fully understood. The purpose of this study was to investigate the relationship between career aspiration, academic motivation and academic achievement of second year undergraduate students in the Faculty of Education in Kisii University. The study sought to determine whether there was a relationship between career aspiration and academic achievement of undergraduate students. The researcher adopted comparative and correlation design. The target population in the study was 254 second year, second semester undergraduate students in the Faculty of Education of Kisii University, with 148 as the sample size which was determined using Krejcie and Morgan, table for determining sample size from a given population. Students' questionnaires and past examination records were used to collect data. Data collected were analyzed using statistical package for social sciences (SPSS) version 20 and interpreted in line with the study hypotheses. The study established a statistical significant relationship between career aspiration and academic achievement ($p=0.61$; $p>0.05$) for Philosophy, and ($p=0.22$; $p>0.05$) for Education Psychology. The researcher recommended that career guidance be strengthened and motivational strategies be strengthened to improve on student's academic achievement.

Keywords: motivation, achievement, psychology, philosophy, academics

BACKGROUND TO THE STUDY

Globally, higher education, and particular university education is recognized as a key force for modernization and development (Kasenene, 2010). Due to this, there has been a high rapid demand for higher education in recent years. Like in 2009, there were nearly 153 million students enrolled in universities around the world, representing an increase of over 50 percent in just nine years (Labi, 2009). Notably, a large portion of this growth has been concentrated in the developing world where most counties are faced with challenges related to unemployment, underemployment and few job promising careers (Bloom and Rosovsky, 2000). This has led to greater competition for few promising careers where parents tend to control the career choices for students.

Studies done by Domene, Socholutiuk and Woitowicz (2010) on academic motivation of an online sample of 380 college students in Canada and United States of America on the effects of career outcome expectations and type of aspiration, revealed that students who perform highly on Scientific Technology Engineering and Mathematics (STEM) and Career Outcome Expectations (COE) are extrinsically and intrinsically motivated in terms of their academics. Further in another study conducted in Canada, indicated that participation in post secondary education is a prerequisite entry into many career paths (Shapk, Domene, and Keating, 2006). It follows, then, that if a student has a positive expectation for career outcome, he will have a positive career outcome. Career outcome is an important source of motivation for engaging in a students' program of study. Conversely, students with low career outcome expectations will not be motivated hence cannot excel in studies.

A few studies were found to have directly investigated the relationship between academic motivation, more specifically, the type of academic motivation (intrinsic and extrinsic) and university students' overall academic achievement. However in a recent study, Matthews, Hoessler, Jonker and Stockley (2013) conducted a study to establish the relationship between academic motivations and students' academic achievement in Calculus, a Mathematics course at university level. The sample for the study consisted of six hundred and fifty (650) first year university students enrolled in an Engineering Calculus course at a mid-sized Canadian University. The findings showed that across all the measures of academic performance, high academic motivation as indicated by greater self-determination predicted higher grades. When the regression of final exam scores was examined against the three combined motivation scales (intrinsic motivation, extrinsic motivation and amotivation), it was found that the students who were more extrinsically motivated and those who were amotivated had lower final exam scores. Students' intrinsic motivation, however, did not predict their academic performance. While the findings based on the Canadian University are relevant to the present study, it reflects a context

quite different from Kenya. Moreover, the sample was drawn from a developed country and given that Kenya is a developing country, a similar study was needed in order to report on the cross-cultural differences and similarities if any.

Chang (2014) conducted a study in the United States of America to examine the role of intrinsic and extrinsic motivation on perfectionism and procrastination. This study employed a non-experimental, correlational design using three hundred and thirty five (335) college students (260 females, 75 males) from social sciences classes at California State University, San Bernardino. All participants were asked to complete a series of questionnaires which took approximately forty five (45) minutes to complete. Multiple regression analysis was used to test hypotheses. Results revealed that academic motivation was a significant predictor of academic procrastination ($R^2 = .036$; $F(2,332) = 6.13$, $p < .003$). Further, the study indicated that intrinsic and extrinsic motivation had a moderate relationship with Trait Anxiety and Academic Procrastination. While the predominantly American literature in the field is of great benefit to the current study, it reflects a context quite different from Kenyan. Hence the current study attempted to provide literature and findings that may help in the development of policies and practices in the Kenyan situation that will reflect the children, families, schools and communities in the local environment.

Matuga (2009) investigated self-regulation, goal orientation, and academic achievement of secondary school students in online university courses in Ohio, America. The sample consisted of forty (40) students and the results showed that high achieving students had the highest means on the motivation subscale which measured goal orientation, intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self-efficacy for learning and test anxiety. This indicated that there was a positive relationship between motivation and academic achievement. However, the relationship between academic achievement and the specific types of academic motivation was not reported.

Mutweleli (2014) conducted a study in Kenya, on academic motivation and self-regulated learning as predictors of academic achievement of students in public secondary schools in Nairobi County. The study adopted an ex post facto research design. The sample for the study consisted of nine hundred and thirty eight (938) form three students selected from ten (10) public secondary schools. Purposive, stratified and simple random sampling procedures were used in the selection of schools and participants. Both descriptive and inferential statistical procedures were used to analyze the data. The results provided evidence that there was a significant relationship between academic motivation and academic achievement. Further, it was found that among the domains of academic motivation, intrinsic motivation towards accomplishment and organizing strategy had the highest positive predictive value on academic achievement.

Significant sex differences were found with regard to academic motivation and they were in favour of boys. Ultimately, students' self-regulated learning was found to have the highest positive predictive value on academic achievement as compared to academic motivation. Unlike this study, the present study expanded on the study by using both quantitative and qualitative approaches using comparative and correlation research design to have a deeper understanding into the phenomenon under study.

Kumari and Chamundeswari (2015) conducted a study to investigate the relationship between achievement motivation, study habits and academic achievement at the secondary school level unlike the current study that was conducted among university students. Survey method was used to select a sample of four hundred and fifty seven (457) students in different categories of schools, namely, state, matriculation and central board schools by random sampling technique. The chosen sample comprised of one hundred and forty one (141) students from the state board, one hundred and fifty nine (159) students from matriculation board and one hundred and fifty seven (157) students from the central board schools. Achievement Motivation Scale (Beena, 1986) was used to measure students' achievement by motivation. Study Habits Inventory (Gopal Rao, 1974) was used to test the students study habits and Academic Achievement Test to assess students' achievements. The results of the statistical analyses showed a significant correlation between achievement motivation, study habits and performance of students. A significant difference was found between students in different categories of schools and gender pertaining to achievement motivation, study habits and academic achievement.

Emmanuel, Adom, Josephine and Solomon (2014) conducted a study to establish the relationship between achievement motivation, academic self-concept and academic achievement of high school students. In addition, the study investigated the students profile to ascertain the levels of achievement motivation, self-concept, and their academic achievement. A total of one hundred and twenty (120) students selected from four high schools participated in the study unlike the present study that was carried among university students. The results showed that, majority of the high school students were highly motivated, had high self-concept and performed well in the Mathematics Achievement Test. The study also revealed a significant correlation between self-concept and academic achievement. Again, there was a positive relationship between achievement motivation and academic achievement but the correlation was not significant.

A descriptive correlation study was performed on two hundred (200) students of Kermanshah Payame Noor University who were selected by multi-stage clustered sampling during 2013-2014 academic year by Naser (2015). The purpose of the study was to establish the relationship between students' academic self-concept, motivation and academic achievement. Data was collected using the Herman's questionnaire of achievement motivation while Delavar

questionnaire of academic self-concept and the mean scores of students were used as an index for academic achievement. Data were analyzed by the use of Pearson correlation coefficient. The study established that there was a significant relationship between achievement motivation and academic achievement. However the study did not establish the extent to which intrinsic and extrinsic motivation predicts academic achievement of the students which was investigated in the current study.

Geesje and Louise (2014) conducted a study in South Africa to explore the relationship between university students' academic self-concept, motivation and academic achievement. The primary aim of this study was to determine whether academic self-concept and motivation of students enrolled for the Quantity Surveying Course at a university could predict their level of academic achievement. By means of a non-probability convenience sampling technique, all residential students in their first to fourth year of study who were registered for the major subject Descriptive Quantification in the Department of Quantity Surveying were included in the sample. A questionnaire was used as the data collection instrument. The results of this empirical investigation, as confirmed by the statistical analysis carried out, revealed that there was a significant correlation between academic motivation and academic achievement. Unlike this study that used non-probability convenience sampling technique, the current study used probability sampling techniques which are more appropriate when it comes to the generalization of study findings.

METHODOLOGY

The study utilized the quantitative approach in that it was based on variables based with numbers and analyzed with statistical procedures (Creswell, 2003). In particular the study was comparative and correlational. A comparative study is a study that involves the comparison of two or more groups of a population. The study compared the academic achievement between male students and female students. Correlation research design was used to discover the predictive relationship and the degree of association among variables. The choice of the design is based on its ability to explore the correlation relationships among variables that cannot be manipulated experimentally (Orodho, 2009). The study was carried out in Kisii University, main campus, in Kisii County. The university is located 2.5 km from Kisii Town Centre, off the Kisii-Kilgoris road. Maseno University, which is the nearest public university, is 137.8 km away. The target population in the study was two hundred and fifty four (254) second year, semester two undergraduate students in the Faculty of Education of Kisii University.

A sample size was determined using (Krejcie and Morgan, 1970) table for determining sample size from a given population

Table 1: Samples of respondents that were used in the study.

Characteristics	Number	percentage (%)
Age group		
18 – 22	124	83.78
23 – 27	20	13.51
28 – 32	1	0.68
Over 38	3	2.03
Total	148	100
Sex/Gender		
Male	77	51.6
Female	71	48.4
Total	148	100
Course		
BA Ed	82	55.4
BSC Ed	66	44.6
Total	148	100
Programme		
Full time	141	95.3
School based	6	4.0
Part time	1	0.7
Total	148	100

Source: Researcher, 2017

Table 1 above shows that the study used 148 participants, out of whom 124 were between 18 and 22 years, 20 were between 23 and 27 years while 1 was between 28 and 32 years.

The sampling procedure that was used to select the students was the stratified random sampling procedure because the population from which the sample was derived was heterogeneous.

The study benefited from primary data sources by contacting respondents for first hand data using a Self Administered Questionnaire that was aimed at collecting data. Test-retest was done to find the reliability of the research instruments. Content validity was established through discussions with experts. Quantitative data analysis involved the use of descriptive and inferential statistics with the aid of Statistical Package for Social Sciences version 20. The descriptive statistics that were used include frequency counts and percentages.

The researcher requested to meet the students to whom the purpose of study was explained and the students were requested to participate.

RESULTS

The study sought to find answers as to whether there is a significant relationship between academic motivation and academic achievement of second year undergraduate students in the Faculty of Education in Kisii University, Kenya. The hypothesis of this study stated that; “there is no statistical significant relationship between academic motivation and academic achievement of second year undergraduate students in the Faculty of Education in Kisii University, Kenya”. Academic motivation was categorized as either intrinsic motivation or extrinsic motivation, while academic achievement was measured by performance in two subjects Education Psychology and Philosophy of Education as shown in Table 2 below.

Table 2: Relationship between students’ academic motivation and their academic achievement

Variable	Academic Achievement			
	Education Psychology	Sig	Philosophy	Sig
Intrinsic factors				
I make an effort in my study because others expect me to do it	-0.106	0.202	0.077	0.003
I try to get good grades because I want to get a good job in the future	-0.115	0.163	0.045	0.163
I do my best in my study because otherwise I’ll have disagreements with my parents.	0.0320	0.699	0.011	0.006
I make an effort of my study because I want people to admire me in future.	-0.043	0.603	0.098	0.603

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I study hard because I want to earn				
a lot of money in the future.	-0.096	0.244	-0.041	0.616
Overall	-0.0656	0.3822	0.0380	0.2782
Extrinsic factors				
I like learning new skills	0.157	0.068	-0.07	0.068
I like being busy with my school study.	0.153	0.063	0.49	0.229
I am curious about how things	0.20	0.811	0.10	0.616
I think what I can achieve with my study is more important and I like what I'm studying.	0.209	0.011	0.011	0.923
I often do more than I am required because I enjoy it.	0.079	0.339	-0.033	0.383
Overall	0.1596	0.0517	0.0996	0.0448
Total	0.0470	0.2169	0.0688	0.1615
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Source: Researcher 2017.

Table 2 shows the results of the relationship between academic motivation and academic achievement in Education Psychology and Philosophy of Education.

The results revealed that intrinsic motivation of undergraduate students significantly correlates ($p=0.3822$; $p>0.05$) with their academic achievement in Education Psychology and ($p=0.2782$; $p>0.05$) in Philosophy of Education. This indicated that a unit increase in intrinsic motivation caused 38.22% increase in academic achievement in Education Psychology 27.82% increase in academic achievement in Philosophy of Education.

The results also indicated that extrinsic motivation of teacher trainees correlated significantly ($p=0.0517$; $p=0.05$) with academic achievement in Education Psychology. However, it was quite different in Philosophy of Education where extrinsic motivation correlated, weakly and significantly ($p=0.0448$; $p<0.05$) with students' academic achievement. This indicated that a unit increase in extrinsic motivation of teacher trainees caused a 5.17% increase in academic achievement in Education Psychology and a unit increase in extrinsic motivation of undergraduate students in Kisii University caused a 4.48% increase in academic achievement in Philosophy of Education.

The table 3 further explains the relationship between intrinsic and extrinsic motivation and academic achievement. Academic motivation was categorized as either intrinsic motivation or extrinsic motivation, while academic achievement was measured by performance in the two subjects; Education Psychology and Philosophy of Education.

Table 3: Relationship between intrinsic and extrinsic motivation and academic achievement of students in Education Psychology and Philosophy of Education.

Variables	Academic achievement					
	Education Psychology			Philosophy of Education		
Academic motivation	Mean	S.D	Sig	Mean	S.D	Sig
Intrinsic	-0.066	-0.0045	0.3822	0.0380	0.0026	0.2782
Extrinsic	0.1596	0.054	0.0517	0.0996	0.00673	0.0048
Overall	0.0470	0.009	0.2169	0.0688	0.0047	0.1615

Source: Data Collected from the field (2015)

Table 3 shows the correlation between teacher trainees’ academic motivation and academic achievement disaggregated into the two variables: intrinsic motivation and extrinsic motivation. The results revealed that the undergraduates’ intrinsic motivation significantly correlated ($p=0.3822$; $p>0.05$) with their academic achievement in Education Psychology. This was also reflected in the academic achievement in Philosophy of Education where intrinsic motivation correlated significantly ($p=0.2782$; $p>0.05$). This indicated that a unit increase in intrinsic motivation caused 38% increase in academic achievement in Education Psychology while a unit increase in intrinsic motivation causes 27% increase in academic achievement in Philosophy of Education. Similar results were exhibited in extrinsic motivation in relation with students’ academic achievement. Extrinsic motivators of teacher trainees correlated, positively and significantly ($p=0.0517$; $p=0.05$) with academic achievement in Education Psychology. Similar results were exhibited with Philosophy of Education where extrinsic motivation correlated positively, ($p=0.0448$; $p<0.05$) with students’ academic achievement. This indicated that a unit increase in extrinsic motivation caused a 5.17% increase in academic achievement in Education Psychology and a unit increase in extrinsic motivation also caused 4.48% increase in academic achievement in Philosophy of Education.

Overall, academic motivation had a positive and significant relationship with Education Psychology ($p=0.2169$; $p>0.05$). There was also a significant positive correlation ($p=0.1615$; $p>0.05$) with students' academic achievement in Philosophy of Education. Overall, there was statistical significant relationship between the students' academic motivation and their academic achievement. This proved that generally academic motivation at all levels was a predictor of academic achievement among second year undergraduate students.

According to the results as revealed in tables 4.7 and 4.8, the null hypothesis, "there is no statistical significant relationship between academic motivation and academic achievement of second year undergraduate students in the Faculty of Education in Kisii University". The H_0 was rejected, and the alternative hypothesis was adopted. "There is a statistical significant relationship between academic motivation and academic achievement of second year undergraduate students in the Faculty of Education in Kisii University, Kenya." This meant that these results were statistically significant.

According to the findings in this study, the low scores among undergraduate students could be attributed to some students lacking intrinsic motivation at the beginning of their undergraduate studies. From the responses obtained from the questionnaire on academic motivation, some respondents indicated that they made an effort for their study because others expected them to do it. Some indicated that they did their best in their studies because they did not want disagreements with their parents. This explains why some students graduate from university with a Bachelor of Education Science or Arts course and end up pursuing a different career altogether. Some elected the educational courses because they would not be interested in the teaching profession but just to secure a wider range of employment opportunities in the future. Some did not want to work as teachers in the future, and others wanted to become teachers, but only for a limited time in their professional life. Researchers have noted that student's achievement goals, their interest in courses and their success expectancies were positively related to their final course grade. The low marks also reflected students' devotion in the time and effort to their studies. Some of the students enrolled in these education courses may be characterized by learning helplessness and fail to put forth reasonable efforts when necessary. Others may appear to be motivated but are primarily worried about performance and thus avoid the challenge of difficult tasks or new academic experiences. These findings are in support of Ali, McInery, (2009), who argued that there is a relationship between motivation components and academic achievement. It is also further in agreement with Jason (2010) in a study about the relationship between intrinsic academic motivation and academic achievement of both best and worst performers.

On the other hand, some students had extrinsic motivation which propelled them to their achievement goals. They indicated that they had interest in the course and their success was positively correlated with their performance in academics. Some indicated that they wanted to get a good job in the future and earn a lot of money while others indicated that they were studying hard because they thought that what they could achieve was more important and they liked and enjoyed being teachers. On the same note, they were curious about how things work and this made them want to learn new skills.

CONCLUSION

Based on the findings of this study ‘there is no statistical significant relationship between academic motivation and academic achievement of second year undergraduate students in the faculty of education in Kisii University, Kenya’. It was concluded that academic motivation plays a dominant role in academic achievement. So it is advisable that learners are motivated through seminars, workshops, gifts, rewards and praises. This in turn will produce results. In addition, motivation has been shown to positively influence study strategies, academic performance and well being of students in domains of education, therefore, studying motivation on students is important as it propels learning. It is evident that positive correlation between motivation and performance has been significant in education among learners at all levels.

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