

Amalgamating Different Achievement Goal Orientation Across School Types: A Case Of Gatundu South Sub County, Kiambu County, Kenya

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Abstract

The study was designed to determine the differences in achievement goal orientation due to school type. The research adopted a correlational study design. Using stratified random sampling 12 schools were selected. Through proportionate stratified sampling, one girl's only and one boys' only boarding, one co-educational boarding and nine co-educational day schools were selected. Participants were 631 secondary school students in form three. All the participants completed the Achievement Goal Questionnaire Revised (AGQ-R). To examine school type differences, Analysis of Variance (ANOVA) was used. Hypotheses was tested at a =.05 level of significance. The findings revealed significant differences in the four domains of achievement goal orientation given the categories of school types ($F(12, 1872) = 10.334$). However, the difference was not in favour of co-educational day and boys' boarding.

Key words: Achievement Goal orientation, Co-educational boarding; Co-educational day; School Type

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I. INTRODUCTION

Background of the study

Several motivation researchers have used achievement goal perspective to understand and explain academic outcomes (Elliot & McGregor, 2001; Law, Elliot, & McGregor, 2012; Meece, Anderman, & Anderman, 2006; Phan, 2014; Sideridis & Kaplan, 2011). Achievement goals represent the purpose or reason students engage in an academic learning task. In previous works, researchers distinguished between two types of achievement goals: mastery and performance goals. In mastery goals students are motivated to understand learning material and develop skills, while in performance goals students are concerned with outperforming others. Both goals are linked to different patterns of learning. Elliot and McGregor (2001) proposed incorporation of approach and avoidance orientations to achievement goals. That is, the outcome can either be a success or failure. When students expect success, they are motivated towards an approach orientation, while, students expecting failure are motivated towards an avoidance orientation.

Recent research on education has begun to examine the effects of contextual factors and goal tendencies. This is because contextual factors are considered to be responsive to personal factors related to academic outcomes (Diseth & Samdal, 2015). In addition, research in the area of educational Psychology has found a link between type of school which students attend and academic achievement (Otanga, 2016). Achievement goal orientation has emerged as an important personal factor in education setting. Majority of studies has examined relationship between achievement goals and academic outcomes such as academic achievement (Ileri, 2015). However, school type differences in motivational factors such as achievement goals is less known. It is against this background therefore the current study sought to investigate school type differences in achievement goal orientation.

Statement of the Problem

Locally, girls and boys can be taught separately or together and either in boarding or day secondary schools. The differences in and within school type may be important factors which contribute significantly to students' academic achievement (Mutweleli, 2014). These differences may impact positively or negatively on individual achievement goal orientation thus need for this study.

Objective / Hypothesis of the Study

The objective of the study was to find out the school type differences in students' achievement goal orientation.

The study was guided by the following alternative hypothesis:

H_{a1} There are significant per school type differences in students' achievement goal orientation.

Significance of the Study

The study may aid educators and policy makers such as the MOE to understand students' achievement goal orientation so that teacher trainees are equipped with the necessary training skills to enhance students' motivation for learning. The findings could also provide relevant information to curriculum developers to design appropriate instructional materials, educational objectives and programs that foster better academic achievement in different types of school for students.

II. REVIEW OF RELATED LITERATURE

Introduction

The literature review was guided by the study objective which was to find out the school type differences in students' achievement goal orientation.

School Type and Students' Achievement Goal Orientation

School type differences in students' Achievement Goal Orientation are evident in several studies. A study by Sungur and Senler (2010) established the relationship between achievement goals, classroom environment perceptions, competence expectancies and motivation among elementary students. The sample consisted of 482 students, attending urban, public co-educational schools in Turkey. The students' age range was 10 to 14 years from Grade 4 – Grade 8. Convenience and cluster random sampling methods were used to select the participants. Although the study gave insights into relation between elementary students' achievement goals, competence expectancy and classroom environment perceptions, few limitations were noted. First, the study relied on students' responses to self-report questionnaires could be having inaccurate and biased self-report data. Secondly, cluster random sampling raised concerns about the independence of individual scores. The current study utilized simple and stratified random sampling in order to identify different types of school which included: girls only and boys only boarding, co-educational boarding and co-educational day schools.

Locally, studies exploring relationship between school type and achievement goal orientation are not readily obtainable for review, but this relation can be deduced from researches investigating other related factors. Mutweleli (2014) explored the main/ interaction effect between type of school, academic motivation and self regulated learning, as the factors, in predicting academic achievement of students in public secondary schools. The results showed a significant interactive effect between type of school, academic motivation and level of self-regulated learning.

A study by Ileri (2015) explored the interaction of school type and achievement goal orientation among Form Three students. The sample comprised of 375 participants. The findings indicated that approach achievement goal orientation significantly predicted students' academic achievement in Girls only boarding schools and in Boys only boarding schools. Avoidance achievement goal orientation significantly predicted students' academic achievement. However, achievement goal orientation in coeducational day schools was marginally insignificant. Notably a non-significant predictive value was revealed in co-educational boarding schools.

In another local study, Mwangi, Okatcha, Kinai, and Ileri (2015), using boys and girls in boarding, and mixed day public secondary schools in Kiambu County, Kenya, investigated the relationship between academic resilience and academic achievement. Although the study variables were different, the results seemed to indicate that an internal personal factor did not develop by chance but rather it was promoted or hindered by type of school. Using 400 participants selected on the basis of boarding or day, single gender or mixed schools in Nairobi County, Wawire (2010) reported a significant positive relationship between motivation orientation and academic outcomes. The cultural milieu of the participants was the same.

Theoretical Framework

The study was guided by Goal Orientation Theory by Elliot and McGregor (2001). According to Elliot and McGregor (2001), learners' focus on achievement will affect their educational outcomes such as cognitive processes, intrinsic motivation and academic grade. Achievement goal theorists focus on students' aims for choosing and engaging at various learning tasks. Motivational theorists initially identified two achievement goals: a mastery goal and a performance goal. Elliot and McGregor (2001) later modified a 2 x 2 achievement goal framework and put goals into approach – avoidance valence and mastery and performance valence.

Within the model, four types of goals were realized: mastery - approach orientation versus mastery - avoidance orientation and performance – approach orientation versus performance – avoidance orientation.

The present study validated the 2 x 2 dimensional model of achievement goal orientation in a sample of a developing country. The students' achievement goal orientation was hypothesized to be influenced by the type of school attended.

III. PROCEDURE METHODOLOGY

Research Design

Correlational research design was used.

Site of the Study

This study was carried out in Gatundu South Sub- County, Kiambu County. Kiambu County is situated in the former Central Province of Kenya and covers an area of 2,449.2km².

Study Population

The study target population was all year 2022 students in Form Three from public secondary schools in Kiambu County According to statistics from Kiambu C D E Office, there are approximately 27,697 Form Three students. The accessible population was 3136 (1695 boys and 1441 girls) students from Gatundu South Sub-County.

Sampling Techniques

Purposive sampling was used to select Gatundu South Sub- County, public secondary schools and Form Three classes. Using a list of all the public secondary schools in Gatundu South Sub- County as the sampling frame, stratified random sampling helped to group the schools into strata. This sampling method was appropriate because the population embrace a number of distinct categories (Chaturvedi, 2009). In total 12 schools participated in the study, representing 34 % of all schools in the Sub-County. Proportionate stratified random sampling was used to select 631 student participants. This was to ensure equal representation of schools in each stratum (Stangor, 2010). It was to ensure equal representation of boys and girls in the study.

Table 3.1
The Sample composition

School Type	No. of Schools	Population		sch.	Sample size		Total
		B	G		B	G	
		students			students		Sample
		B	G		B	G	
BBS.	6	738	-	1	172	-	172
GBS.	7	-	609	1	-	20	120
Co-B	4	117	190	1	7	12	19
Co -D	18	840	642	9	209	145	354
Sub-total		1695	1441		388	277	
Total	35	3136		12	665		665
Percentage	100	100		34	21		21

Note. BBS = Boys Boarding School; GBS; Girls' Boarding School; Co-B = Co-educational Boarding; Co-D = Co-educational Day; B=Boys; G=Girls; Sch = School

Research Instruments

The researcher used a self- administered questionnaire.

Questionnaire

The Achievement Goal Orientation Scale

The study adopted the 2 x 2 Achievement Goal Questionnaire Revised (AGQ-R) (Elliot & Murayama, 2008). This researcher sought permission to use this scale from the author. The 2 x 2 AGQ-R was a 12 items' instrument divided into four subscales (mastery approach, mastery avoidance, performance approach, performance avoidance). Each sub-scale contained 3 items measured on a 5-point rating scale (1 = *strongly agree* to 5 = *strongly disagree*).

Data Analysis

The quantitative data obtained was coded for statistical analysis using the Statistical Package for Social Sciences (SPSS), Version 21. The study employed descriptive and inferential statistics to analyse data. The descriptive statistical procedures were used to report demographic and institutional features of the students and inferential statistical procedures were used to test hypothesis at a = .05 level of significance. The following null hypothesis and statistical test guided the data analysis:

H₀₁: There are no significant differences per school type and students achievement goal orientation.
 Statistical test: Analysis of Variance.

Ethical Considerations

The researcher sought informed consent from the participants of the study prior to data collection through a consent form. Only the students who gave consent participated in the study. To ensure confidentiality, the researcher assured the participants that the purpose of the exercise was purely for the study undertaken and that the data would not be used whatsoever in any other circumstances. They were also not required to write their names.

IV. RESULTS AND DISCUSSIONS

Introduction

This section presents the findings as per study objective and hypotheses. Specifically, details of demographic characteristics of the respondents, followed by the findings, interpretations, discussion and exploratory analysis of the data is given.

Table 1
Distribution of Respondents by Type of School

Type of School	Frequency (%)
NoResponse	2 (0.3)
BoysBoarding	164 (26.0)
Girls Boarding	119 (18.9)
Co-educational Boarding	19 (3.0)
Co-educational Day	327 (51.8)
Total	631(100.0)

The data presented in Table 1 reveal that majority of students (51.8%) was from co-educational day school, 26% was from boys' boarding. About 19% and 3% were from girls' boarding and co-educational boarding schools respectively. The 'no response' was only 0.3% of the participants.

School Type Differences in Students' Achievement Goal Orientation

The objective sought to find out the school type differences in achievement goal orientation.

Descriptive Analysis of Achievement Goal Orientation Based on School Type

Descriptive analysis of respondents' goal orientation based on school type differences is shown in Table 2:

Table 2
Descriptive Analysis for Achievement Goal Orientation

TOSSub-Scale	N	Range	Min	Max	M	S D	Sk	Kur	
BB	MAPP	164	11	4	15	10.18	2.914	-.959	.377
	MAVO	164	12	3	15	8.62	2.855	-1.028	.377
	PAPP	164	11	4	15	9.74	2.932	-.878	.377
	PAVO	164	12	3	15	9.79	3.001	-.890	.377
	Valid N (listwise)	164							
GB	MAPP	119	15	0	15	10.59	3.153	-.056	.440
	MAVO	119	15	0	15	7.89	2.881	-.293	.440
	PAPP	119	15	0	15	10.61	3.312	-.076	.440
	PAVO	119	15	0	15	8.32	3.579	-.927	.440
	Valid N (listwise)	119							
CO-EB	MAPP	19	11	3	14	9.42	3.805	-1.525	1.014
	MAVO	19	10	3	13	7.68	2.730	.223	1.014
	PAPP	19	10	5	15	11.37	3.655	-.429	1.014
	PAVO	19	11	3	14	7.58	3.548	-.977	1.014

	Valid N (listwise)	19							
CO-ED	MAPP	327	12	3	15	10.56	2.838	-.450	.269
	MAVO	327	12	3	15	7.05	2.440	-.299	.269
	PAPP	327	12	3	15	11.50	2.857	-.003	.269
	PAVO	327	13	2	15	7.03	2.946	-.564	.269
	Valid N (listwise)	327							

Note. MAPP= Mastery Approach; MAVO= Mastery Avoidance; PAPP= Performance Approach; PAVO= Performance Avoidance; BB= Boys Boarding; GB= Girls Boarding; CO-EB=Co-educational Boarding; CO-ED=Co-educational Day; M=Mean; SD=Standard Deviation;SK= Skewness;KUR=Kurtosis;TOS=Type Of School

From Table 2, Girls Boarding had the highest mean score for mastery approach, 10.59 (SD= 3.153), followed by co-educational day school, 10.56 (SD= 2.838), Boys’ Boarding 10.18(SD= 2.914) and Co-educational Boarding had 9.42(SD =3.805). The Co-educational Day had the highest mean score for performance approach, 11.50(SD= 2.857), followed by Co-educational Boarding, 11.37(SD= 3.655),Girls Boarding 10.61 (SD= 3.312) and Boys’ Boarding 9.74(SD = 2.74). Boys’ Boarding had the highest mean score for mastery avoidance and performance avoidance 8.62 (SD =2.855) and 9.79(SD= 3.001) while Co-educational Day had the lowest 7.05(SD= 2.440) and 7.03(SD =2.946) respectively. Respondent scores on mastery avoidance from Co-educational Boarding were positively skewed, indicating low performance on that sub scale. Scores on the other sub scales in all the schools were negatively skewed, indicating a high performance on those sub scales. All the scores for Kurtosis were less than 3, which indicated that they were normally distributed.

Hypothesis Testing

To determine whether there were significant school type differences in students’ achievement goal orientation, the following null hypothesis was formulated:
H₀₃: There are no significant differences per school type and students’ achievement goal orientation.

The following supplementary hypotheses were further formulated to test the hypotheses:

- H_{03.1}: There are no significant differences per school type and students’ mastery approach.
- H_{03.2}: There are no significant differences per school type and students’ mastery avoidance.
- H_{03.3}: There are no significant differences per school type and students’ performance approach.
- H_{03.4}: There are no significant differences per school type and students’ performance avoidance.

To test these supplementary hypotheses, a one way multivariate analysis of variance (MANOVA) test was conducted. This test was suitable since there was more than one dependent variable being measured against the different groups in the independent variable. The findings are shown in the subsequent Tables:

Table 3
Box's Test of Equality of Covariance Matrices for Type of School

Box's M	79.238
F	2.546
df1	30
df2	15752.590
Sig.	.000

Note. a= Design: intercept+ type of school

From Table 3, homogeneity of variance-covariances matrices was violated, as assessed by Box's test of equality of covariance matrices ($p < .001$).

Table4
Levene's Test of Equality of Error Variance for School Type

	F	df1	df2	Sig.
MAPP	3.154	3	625	.024
MAVO	4.533	3	625	.004
PAPP	2.193	3	625	.088
PAVO	3.973	3	625	.008

Note. a. Design: Intercept + School type

MAPP= Mastery approach; MAVO= Mastery avoidance; PAPP= Performance approach; PAVO= Performance avoidance

From Table 4, the assumption of homogeneity of variances was violated for mastery approach, mastery avoidance and performance avoidance sub-scales, as assessed by Levene's Test of Homogeneity of Variance ($p < 0.05$). However, for the performance approach sub-scale, there was homogeneity of variances ($p > 0.05$) as assessed by Levene's test of equality of variances.

Table 5

<i>Descriptive Statistics of Achievement Goal Orientation Grouped by Types of School</i>				
Type of school		Mean	Std. Deviation	N
MAPP	Boys boarding	10.18	2.914	164
	Girls boarding	10.59	3.153	119
	Co-educational boarding	9.42	3.805	19
	Co-educational day	10.56	2.838	327
	Total	10.43	2.955	629
MAVO	Boys boarding	8.62	2.855	164
	Girls boarding	7.89	2.881	119
	Co-educational boarding	7.68	2.730	19
	Co-educational day	7.05	2.440	327
	Total	7.64	2.725	629
PAPP	Boys boarding	9.74	2.932	164
	Girls boarding	10.61	3.312	119
	Co-educational boarding	11.37	3.655	19
	Co-educational day	11.50	2.857	327
	Total	10.87	3.077	629
PAVO	Boys boarding	9.79	3.001	164
	Girls boarding	8.32	3.579	119
	Co-educational boarding	7.58	3.548	19
	Co-educational day	7.03	2.946	327
	Total	8.01	3.311	629

Note. MAPP= Mastery approach; MAVO= Mastery avoidance; PAPP= Performance approach; PAVO= Performance avoidance

As shown in Table 5, students in Girls Boarding, Co-educational Boarding and Co-educational Day scored higher in their performance approach ($M = 10.61, SD = 3.312; M = 11.37, SD = 3.655$ and $M = 11.50, SD = 2.857$, respectively) than the other achievement goal orientation sub-scales. However, students in Boys Boarding scored higher on mastery approach ($M = 10.18, SD = 2.914$.) than on the other sub-scales. But Co-educational Day had the lowest mean scores in mastery approach and performance avoidance, 7.05 (SD 2.44) and 7.03(SD 2.946) respectively.

Table 6

<i>Multivariate Tests for Type of School</i>							
Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.921	1810.129 ^b	4.000	622.000	.000	.921
	Wilks' Lambda	.079	1810.129 ^b	4.000	622.000	.000	.921
	Hotelling's Trace	11.641	1810.129 ^b	4.000	622.000	.000	.921
	Roy's Largest Root	11.641	1810.129 ^b	4.000	622.000	.000	.921
TOS	Pillai's Trace	.186	10.334	12.000	1872.000	.000	.062
	Wilks' Lambda	.815	11.044	12.000	1645.949	.000	.066
	Hotelling's Trace	.226	11.689	12.000	1862.000	.000	.070
	Roy's Largest Root	.220	34.276 ^c	4.000	624.000	.000	.180
Note. TOS= Type of School a. Design: Intercept + Type of school b. Exact statistic c. The statistic is an upper bound on F that yields a lower bound on the significance level.							

From Table 6, there was a statistically significant difference between the types of schools on the combined dependent variables, $F(12, 1872) = 10.334, p < .0005$; Pillai's $V = .186$; partial $\eta^2 = .062$. Pillai's Trace was reported considering that there were unequal sample sizes and the Box's Test of Equality of Covariance was statistically significant.

Based on the above findings, the above multivariate test was followed up with individual Univariate one-way ANOVA for each dependent variable. The findings are shown in Table 7:

Table 7

Tests of Between-Subjects Effects

Source		Type III SS	df	M S	F	Sig.	Partial Eta Squared
Corrected Model	MAPP	37.824 ^a	3	12.608	1.447	.228	.007
	MAVO	277.927 ^b	3	92.642	13.208	.000	.060
	PAPP	348.937 ^c	3	116.312	12.986	.000	.059
	PAVO	848.180 ^d	3	282.727	29.281	.000	.123
Intercept	MAPP	23660.048	1	23660.048	2716.022	.000	.813
	MAVO	13903.883	1	13903.883	1982.327	.000	.760
	PAPP	26603.905	1	26603.905	2970.329	.000	.826
	PAVO	15245.630	1	15245.630	1578.934	.000	.716
TOS	MAPP	37.824	3	12.608	1.447	.228	.007
	MAVO	277.927	3	92.642	13.208	.000	.060
	PAPP	348.937	3	116.312	12.986	.000	.059
	PAVO	848.180	3	282.727	29.281	.000	.123
Error	MAPP	5444.554	625	8.711			
	MAVO	4383.701	625	7.014			
	PAPP	5597.845	625	8.957			
	PAVO	6034.780	625	9.656			
Total	MAPP	73940.000	629				
	MAVO	41337.000	629				
	PAPP	80219.000	629				
	PAVO	47219.000	629				
Corrected Total	MAPP	5482.378	628				
	MAVO	4661.628	628				
	PAPP	5946.782	628				
	PAVO	6882.960	628				

Note. MAPP=Mastery Approach; MAVO=Mastery Avoidance; PAPP=Performance Approach; PAVO=Performance Avoidance; SS= Sum of Squares; MS=Mean Squares

- a. R Squared = .007(Adjusted R Squared = .002)
- b. R Squared = .060 (Adjusted R Squared = .055)
- c. R Squared = .059 (Adjusted R Squared = .054)
- d. R Squared = .123 (Adjusted R Squared = .119)

As shown in Table 7, follow-up univariate ANOVAs showed that the mastery avoidance scores ($F(3, 625) = 13.208, p < .0005$; partial $\eta^2 = .06$), performance approach scores ($F(3, 625) = 12.986, p < .0005$; partial $\eta^2 = .059$) and performance avoidance scores ($F(3, 625) = 29.281, p < .0005$; partial $\eta^2 = .123$) were, statistically, significantly different between the students from different schools, using a Bonferroni adjusted α level of .025. However the mastery approach scores ($F(3, 625) = 12.608, p = .228$; partial $\eta^2 = .007$) were not statistically significant between students from different schools. Based on these findings, the three supplementary null hypotheses on mastery avoidance, performance approach and performance avoidance were thus rejected and the alternate hypotheses accepted. However, the supplementary null hypothesis on mastery approach was accepted.

Post hoc pair wise comparison employing Tukey HSD test, where the homogeneity of variances were met and Games-Howell test and where the homogeneity of variances were violated, were done to determine the nature of differences. The findings are shown in Table 8:

Table 8
Post Hoc Analyses

Variable		(I) TOS	(J) TOS	M D (I-J)	SE	Sig.	95% C I			
							LB	UB		
MAVO	Games-Howell	BB	GB	.73	.346	.157	-.171	.62		
			Co-EB	.93	.665	.511	-.91	2.77		
			Co-ED	1.57*	.261	.000	.89	2.24		
		GB	BB	-.73	.346	.157	-1.62	.17		
			Co-EB	.21	.680	.990	-1.66	2.08		
			Co-ED	.84*	.297	.026	.071	.61		
				Co-EB	BB	-.93	.665	.511	-2.77	.91
					GB	-.21	.680	.990	-2.08	1.66
					Co-ED	.64	.641	.756	-1.16	2.43
Co-ED	BB			-1.57*	.261	.000	-2.24	-.89		
	GB			-.84*	.297	.026	-1.61	-.07		
	Co-EB			-.64	.641	.756	-2.43	1.16		
PAPP	Tukey HSD			BB	GB	-.86	.360	.080	-1.79	.07
					Co-EB	-1.62	.725	.114	-3.49	.24
					Co-ED	-1.75*	.286	.000	-2.49	-1.01
		GB	BB	.86	.360	.080	-.07	3.49		
			Co-EB	-.76	.739	.730	-2.67	2.67		
			Co-ED	-.89*	.320	.029	-1.72	1.69		
		Co-EB	BB	1.62	.725	.114	-.24	2.49		
			GB	.76	.739	.730	-1.14	1.72		
			Co-ED	-.13	.706	.998	-1.95	1.95		
		Co-ED	BB	1.75*	.286	.000	1.01	.12		
			GB	.89*	.320	.029	.07	.80		
			Co-EB	.13	.706	.998	-1.69	-1.03		
		PAVO	Games-Howell	BB	GB	1.47*	.403	.002	.42	2.51
					Co-EB	2.21	.847	.072	-.15	4.57
					Co-ED	2.76*	.285	.000	2.02	3.50
GB	BB			-1.47*	.403	.002	-2.51	-.42		
	Co-EB			.74	.878	.833	-1.68	3.16		
	Co-ED			1.29*	.366	.003	.34	2.24		
Co-EB	BB			-2.21	.847	.072	-4.57	.15		
	GB			-.74	.878	.833	-3.16	1.68		
	Co-ED			.55	.830	.909	-1.78	2.88		
				Co-ED	BB	-2.76*	.285	.000	-3.50	-2.02
					GB	-1.29*	.366	.003	-2.24	-.34
					Co-EB	-.55	.830	.909	-2.88	1.78

Note. BB= Boys Boarding; GB= Girls Boarding ; Co-EB= Co-Educational Boarding; Co- ED= Co-Educational Day ;MD; Mean Difference; SE=Standard Error; LB =Lower Bound ;UB=Upper Bound; CL= Confidence Interval; TOS=Type of School Based on observed means.

The error term is Mean Square (Error) = 9.656.

*. The mean difference is significant at the .05 level.

Games-Howell test showed that for mastery avoidance, students from Boys' and Girls' Boarding School had, statistically, significantly higher scores than students from Co-educational Day Schools by 1.57 and 0.84 respectively, ($p < .0005$). For performance approach, Tukey HSD test showed that students from Co-educational Day Schools had statistically significant higher scores than students from Boys' Boarding and Girls' Boarding by 1.75 and 0.89 respectively, ($p < .0005$). For performance avoidance, Games-Howell test showed that students from Boys' Boarding had statistically significant higher scores than students in Girls' Boarding and Co-educational Day by 1.47 and 2.76 respectively, ($p < .0005$).

Discussion of the findings

The study hypothesized that there was no significant difference per school type and students' achievement goal orientation. From the multivariate tests' results, achievement goal orientation had significant difference with the type of school. The results indicated that mastery avoidance, performance approach, performance avoidance had statistically significant differences while no significant differences were registered for mastery approach based on participants type of school. In addition, Boys' and Girls' Boarding Schools had significantly higher scores for mastery avoidance than students from Co-educational Day School. However, Co-educational Day Schools had significantly higher scores for performance approach than Boys' Boarding and Girls' Boarding, while Boys Boarding had significant higher scores for performance avoidance than students in

Girls Boarding and Co –educational Day. Notably, there were no significant differences reported in the Co-educational Boarding across all the levels of achievement goal orientation.

The findings of a significant difference between the type of school and achievement goal orientation corroborates the finding of Ireri (2015) who explored the interaction of school type and achievement goal orientation among Form Three students in Embu County, Kenya. In Girls Only Boarding, approach achievement goal orientation significantly predicted academic achievement while avoidance achievement goal orientation significantly predicted academic achievement in Boys Only Boarding Schools. Similarly, Post Hoc analyses revealed a non- significant predictive value for Co-educational Boarding Schools. The quantitative finding also supports Mutweleli (2014) who reported a significant interaction effect between type of school and personal factors like academic motivation and level of self-regulated learning. However, the two variables did not significantly predict academic achievement in Girls' Boarding Schools.

These findings seem similar to those of Flum and Kaplan (2010, as cited in Ireri, 2015) that school is a vital setting for the development of students' achievement goals. It is likely that the differences in and within school may be an important factor contributing to variance in students' academic achievement. The results in Table 8 indicate that the mean difference was not in favour of students from Co-educational Boarding. This seemed to show that the learning experiences in Co-educational Boarding did not sufficiently encourage the development and use of achievement goal orientation.

V. SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Introduction

The chapter consists of the summary, conclusions and recommendations made by the researcher from the study findings.

Summary of findings

The objective of this study sought to identify differences per school type in students' achievement goal orientation. The study found out a statistically significant difference between types of schools and achievement goal orientation. Further analysis revealed that among the four types of achievement goal orientation, that is, mastery approach, mastery avoidance, performance approach and performance avoidance, it was only the mastery approach which showed no significant differences based on participants' type of school. Moreover, post hoc analyses indicated that Boys' and Girls' Boarding Schools had higher scores for mastery avoidance, Co-educational Day School had higher scores for performance approach while Boys Boarding had higher scores for performance avoidance. There were no significant differences shown in the Co-educational Boarding students across all the levels of achievement goal orientation.

Conclusion

This study showed that type of school is one of the factors that could account for differences in students' achievement goal orientation. This points to the role of specific school environments in the development of students' achievement goals. Furthermore, the differences were more in Co-educational Day Schools. This could explain the rather poor performances and differences among Co-educational Day Schools.

Recommendations

Based on this study's findings, the following recommendations for policy and further research were made:

- i. The differences in students' Achievement goal orientation due to type of school attended were found. The differences were more in favour of learners from co-educational day schools and Boy's boarding school. The ministry of education should address issues of type of school and eradicate the inequalities.
- ii. In this study, performance approach showed higher scores among students from Co- educational Day Schools. Psychological experts could help weak students to undergo cognitive restructuring. This would assist them to acquire the capacity to use more of intrapersonal standards than normative standards in performance assessment.
- iii. Future studies could consider experimental methods. In addition, researchers could also adopt longitudinal designs in order to track developmental changes in achievement goals over time among a cohort of students. Both approaches would help to address the issue of causality among variables.

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