

Students' Co-Curricular Participation Perception and Academic Performance in Kenyan Secondary Schools

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Abstract

The study sought to investigate students' co-curricular participation perception and academic performance. The research objectives of the study were: to investigate the relationship between students' co-curricular participation perception and their academic performance and to investigate the relationship between gender, co-curricular participation perception and academic performance. The study was guided by the perception theory of Kurt Lewin as espoused by Smith. The ontology was realist/objectivist and the epistemology was post-positivism. The research method was quantitative. The research design was ex-post-facto. A total of 72 volleyball players, 124 football players participated in the study. A stratified random sampling technique was used to select the sample. The data was collected using a Likert scaled questionnaire. Data was analyzed using frequencies, percentages, means, standard deviations, t-test, Pearson r and a two way ANOVA at $p > .05$ level of significance. The major findings of the study showed that: (59.7%) of the participants (students) had low academic performances; the participants in football were academically superior to those who participated in volleyball and the analysis further revealed that participation in co-curricular activities has no significant relationship with academic performance, $[t(194) = -1.36, p = .176]$. Based on the findings, it was recommended that since sports participation accommodates the less endowed students academically to succeed; there was need to use it to enhance the students' well being. It was also recommended that schools need to provide sufficient opportunities for co-curricular participation as it helps improve the self-concepts of the students. The study showed that there was need to explore on a theory that can guide co-curricular participation perception.

Keywords: Secondary Schools, Academic Performance, Kenyan

Introduction

Sedentary lifestyle is one of the ten leading causes of death and disability in the world, yet the world's proportion of adults who are sedentary or near so, range from 50% – 60% (WHO, 2005). This is due, in part to the rapid transitions in lifestyles, leading to reduced physical activity. Moreover, for many years, interest in physical activity has focused on health related outcomes, such as reduced risk of cardiovascular diseases, osteoporosis and obesity (Kinoti, 1998). Furthermore, from a social psychological point of view, the focus on consequences of participation in physical activity emphasizes on understanding of the determinants of physical activity behaviour (Goodway & Rudisill, 1997). That is, what motivates athletes (students) to continue and sustain physical activity levels? Why is

there a dramatic decline in physical activity levels? What is their performance in other fields (self-concept and academic performance)? Such a psychological perspective leads to possible intervention strategies that can be implemented by parents, teachers, coaches and peer groups who play an active role in the lives of youth at home, neighbourhood, schools and sports contexts (Kinoti, 1998).

According to Ongonga, Okwara and Okello (2010) almost every student in the Kenyan education has experienced co-curricular or extra-curricular activities either as a spectator or participant. Yet, outside athletic participation, research on the effects of participation in specific school activities (e.g. music, drama, netball, basketball, football and volleyball) is scant. History suggests that participation in such activities as band, choir and orchestra have a positive effect on everything, from academic achievement to self discipline and from citizenship to personal hygiene (Morrison, 1994). Besides, Earhart in Ongonga et al. (2010) while addressing the relationship between music and academic achievement argued that music enhances knowledge in the areas of mathematics, science, geography, history, foreign language, physical education and vocational training. Consequently, the recent emphasis on interdisciplinary studies, along with the uncertain future of many school subjects, has provoked renewed interest in cross cultural research.

Research findings indicate that participation in co-curricular activities affects students' academic performance and supports the attainment of academic objectives (Arnoldy, 2005; Marsh 2002; Tucker, 1999). More specifically, studies have been conducted assessing the effects of specific co-curricular activities on academic performance (Bulinde, 2006; Morrison, 1994). Despite this knowledge, sport participation has been viewed in two different perspectives in Kenyan secondary schools as far as their contribution to academic performance is concerned. Some perceive sports to have positive effect on students' academic performance while others view it as a hindrance to academic success and a waste of students' precious time. Therefore, this duality in the perception of the contribution of sports should be corrected through research findings. Besides, it is important to note that sports can assume other functions other than the traditional function of entertainment and leisure. These functions include; supporting academic objectives, boosting students' self-concept, self-efficacy, affective needs, behavioural needs, social needs, discipline, retention rates among others. Consequently, it was the intention of this study to find out the perception of teachers and students on the impact of co-curricular participation on students' self-concept and academic performance in Kenyan secondary schools in Rift Valley region on the educational process. Furthermore, research studies on the influence of co-curricular participation in the development of students' self-concept have not been conclusive. In addition, their impacts on academic performance and students' well being have been scant in Kenya. There was need therefore, to analyze students' and teachers' perceptions of the impact of co-curricular participation on students self-concept and academic performance, because they are directly involved in the educational process.

Overwhelming scientific evidence highlight the health, social and psychological benefits associated with active lifestyles (Matano 1992; McInally, 2003; Bulinde, 2006; Ongonga et al., 2010). Besides, the health, social and psychological contributions of co-curricular participation to the educational process have been identified by studies in the western countries as reported by Tucker (1999), Arnoldy (2005), Marsh and Kleitman (2002), and reported by Ongonga et al. (2010), Bulinde (2006), and Chesire (2007) in Kenya. These benefits are in three fold; the health benefits which include; good body physique or posture, that is, a balanced development of the whole body, the strength and fitness of all muscles. The social factors include; the transmission of values, norms and knowledge of the society, which leads to social harmony in the society. Moreover, the psychological benefits include: positive attitudes towards sports participation, positive correlation with academic performance, student's increased vigor and alertness, and internalization of mental strategies.

Despite this knowledge of the importance of sport participation to educators, there was paucity in empirically known evidence or research in the literature reviewed, on teachers' and students' perception of the impact of co-curricular participations on students' self-concept and academic performance in Kenyan secondary schools. Besides, there appeared to be a duality in perception of the contribution of co-curricular participation to the educational process; with some stuck to the traditional view that sports was an instrument for entertainment and leisure while others were of the view that it can be used to improve achievement of learning objectives. Furthermore, reduced emphasis on participation in co-curricular among the academically and less academically endowed students in schools and other reasons like physical inactivity, discipline, sense of belonging, team building and owning the school process have

not been reported perhaps because its impact has not been fully articulated by educators, parents, teachers, and students and their views sought.

Although education is divided into two parts; curricular activities and co-curricular activities in Kenya, many researchers like Ongonga et al. (2010), McInally (2003) and Newman (2005)¹³ have observed that participation in co-curricular activities is not fully supported by most schools and the contribution of it to the students' self-concept and academic performance have not been clearly articulated to the educators, teachers, students and even parents. Yet, the experiences and opportunities provided by secondary schools through curricular and co-curricular participation also influence students' development. Furthermore, direct interaction with the school curriculum in schools such as the degree of success or failure in various subject matters and the degree of encouragement provided for academic effort influence self-growth, educational aspirations and values of students. Besides, no research has addressed itself to the impact of co-curricular participation on academic performance and looked at it from the perspective of enhancing the self-concept for better performances in both academics and sports, as well as providing opportunities to the less endowed academically student to succeed. Nonetheless, success and failure in life largely depend on the levels of self-concept of the individual concerned. Furthermore, the more the students discover this level and its relationship to the world, the more they know themselves. Moreover, such knowledge provides them with a measure of internal stability and security. Consequently, there was need therefore, to undertake a study that would take into perspective students' perceptions because they are directly involved in the educational process. In addition, they were the recipients of whatever policies concerning co-curricular and academic performance made by the Ministry of Education, yet they rarely get the chance to express their views and opinions. They were therefore, on the receiving end of policy implementation, coupled with varying levels of facilities and infrastructure. Moreover, their perceptions of the impact of co-curricular participation on students' self-concept and academic performance were sought. Hence, the findings would become the basis for understanding the perceived contribution of co-curricular participation to the educational process and institutions.

Objectives of the Study

The purpose of this study was therefore to investigate students' co-curricular participation perception and academic performance in the Rift Valley Region of Kenya. There were two specific objectives pursued in the study. These were:

1. To investigate the relationship between students' co-curricular participation perception and their academic performance.
2. To investigate the relationship between gender, co-curricular participation perception and academic performance.

Methodology

The participants of this study were described by their gender and by the class in which they were learning at the time of data collection. A total of 200 participants, 98 females and 102 males, from secondary schools responded to the Modified Self Description Questionnaire (MSDQ), however only 196 (98 females and 98 males), had complete data that was used in the analysis. The average class size for Kenyan secondary was between 40 – 60 students. The size of the schools ranged from 200 to 1200 students. All the secondary schools are located in Rift Valley Province and are recognized nationally among the Eight Provinces.

Students responded to a Modified Self Description Questionnaire (MSDQ) developed by the researchers. Beside the demographic information of gender section, the second section in the questionnaire was used to measure the student's co-curricular participation perception and comprised of 50 items. These sections were Likert type which provided the respondents with a series of statements to which they could indicate the degree of agreement or disagreement. These sections were modified from a PSDQ (Physical Self Description Questionnaire) developed by Marsh¹⁴ (2001). The participants, who were co-curricular participants, completed the questionnaire in class during lunch hour and games time. It took participants approximately 40 to 50 minutes to respond. All participants were proficient in both spoken and written English.

The participants' responses were coded and categorized into information that could answer the researchers' questions and objectives, and then analyzed using both descriptive and inferential statistics. Therefore, descriptive

themes based on the research questions were developed. Then, the data was coded and entered into the computer for analysis using the Package for Social Sciences (SPSS 16.0). In addition, this allowed the researcher to establish students' co-curricular participation perception and academic performance. To examine whether the themes were significantly different based on class and gender, independent samples tests were computed for each category.

Findings of the Study

Gender and Class of the Participant

The participants of this study were described by their gender and by the class in which they were learning at the time of data collection. This information is reported in Table 4.1.

Table 1.1: Description of Student Participants by Gender and class

Class	Gender					
	Male		Female		Total	
	N	%	N	%	N	%
Form 1	17	8.7	21	10.7	38	19.4
Form 2	24	12.24	14	7.14	38	19.4
Form 3	42	21.4	28	14.3	70	35.7
Form 4	15	7.7	35	17.9	50	25.5
Total	98	50	98	50	196	100

Co-curricular Participation and Academic Performance

The first research question raised was: Is there a relationship between students' co-curricular participation perception and their academic performance? The question was answered by testing the null hypothesis which states that; there is no significant relationship between students' co-curricular participation perception and their academic performance. To answer this question, the participants were asked to respond to a 50 item questionnaire. In addition, the participants' first term examinations results of the year 2012 were obtained and standardized using T – scores. The responses were scored and the results presented in Table 1.2

Table 1.2: Description of Co-curricular Participation and Academic Performance

Co-curricular activity	Academic Performance		
	N	Mean	Std. Deviation
Volleyball	72	36.78	11.97
Football	124	39.60	15.05
Total	196	38.56	14.03

The results of the descriptive statistics presented in Table 1.2 indicate that the participants who participated in football were academically superior to those who participated in volleyball. To determine the actual measures of relationship and establish whether the mean scores of the two groups of respondents were significantly different an independent samples test was conducted. The results of analysis revealed that participation in co-curricular activities (football and volleyball) has no significant relationship with academic performance, $t(194) = -1.36, p = .176$. Therefore, the null hypothesis was accepted. This implies that, there is no significant relationship in academic performance between students who participate in football and volleyball.

Students' Gender and Academic Performance

The second research question raised in the study was; does gender influence students' co-curricular participation perception and their academic performance? The question was answered by testing the null hypothesis which states that; there is no significant relationship between gender (male and female), students' co-curricular participation and their academic performance. To answer this question the participants responded to item 4 in the demographic section of the questionnaire (see Appendix C, section I). In addition, the participants responded to a 50 item questionnaire (see Appendix C, section II - Co-curricular participation perception section) and the participants' first term examinations results of the year 2012 were obtained and standardized using T-scores. The results were scored and presented in Table 1.3, 1.4 and 1.5

Table 1.3: Description of Participants' Gender and Academic Performance

Gender	Academic Performance							
	Low		Average		High		Total	
	N	%	N	%	N	%	N	%
Male	59	30.1	37	18.9	2	1	98	50%
Female	58	29.6	38	19.4	2	1	98	50%
Total	117	59.7	75	38.3	4	2	196	100%

The results of the descriptive statistics presented in Table 1.3, indicated that majority 117 (59.7%) of the participants had low academic performances, while only 2% of the participants had performed highly in academics. It was concluded that majority of the respondents were performing below average in their respective schools. This implies that co-curricular participation provides opportunities for the students to succeed.

Table 1.4: Description of Gender and Academic Performance

Gender	Academic Performance		
	N	Mean	Std. Deviation
Male	98	38.44	13.29
Female	98	38.68	14.80
Total	196	38.56	14.03

From the results of the descriptive statistics presented in Table 1.4, the mean scores indicated that female students are slightly better in academic performance than male students. To test whether the mean scores were significantly

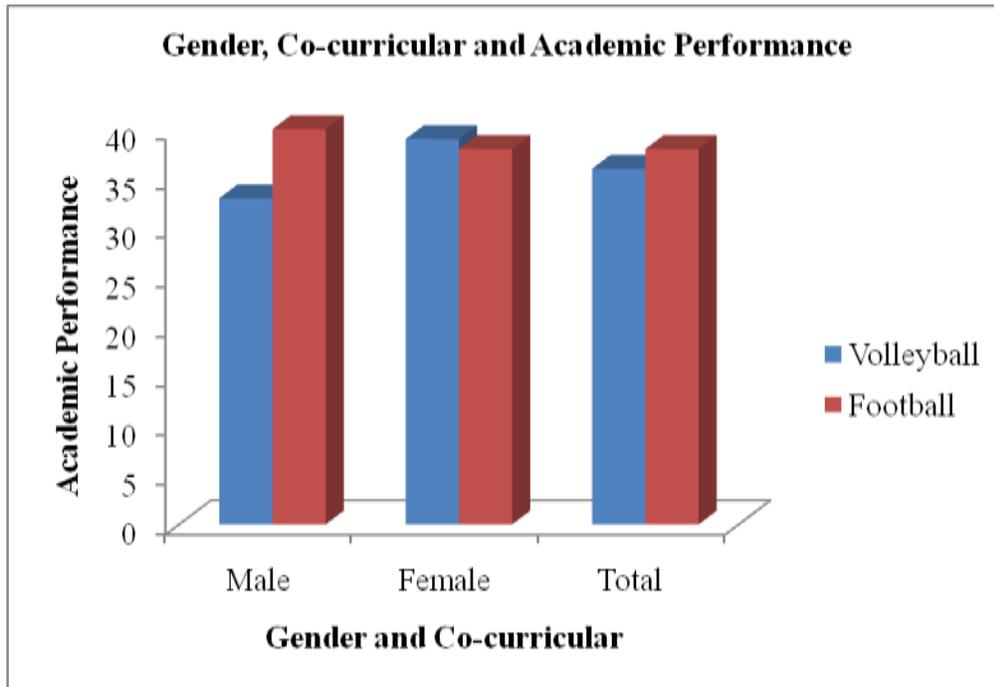
different, independent sample t-test was conducted. The results of the analysis indicated that gender has no significant effect on students' academic performance, $t(194) = -.12, p = .903$. Therefore, the null hypothesis was accepted. From this finding it can be concluded therefore, that there is no significant relationship between gender and academic performance.

Table 1.5: Description of Gender, Co-curricular Participation and academic Performance

Gender	Co-curricular /academic performance								
	Volleyball			Football			Total		
	N	M	SD	N	M	SD	N	M	SD
Male	31	33.32	10.40	67	40.81	13.88	98	38.46	13.29
Female	41	39.39	12.53	57	38.18	16.33	98	38.68	14.80
Total	72	36.78	11.97	124	39.60	15.05	196	38.56	14.03

From the analysis in Table 1.5 it was revealed that co-curricular participation seems to influence students' academic performance. It was also revealed that gender seem not to affect students' academic performance. But gender and co-curricular activities seem to influence students' academic performance. To test whether gender and participation in co-curricular activities have a significant effect on students' academic performance a two way Analysis of Variance (ANOVA) was conducted. The results of analysis revealed that gender and participation in co-curricular activities statistically have no significant effect on students' academic performance $F(1,196) = .685, P = .004$ and $F(1,196) = 2.28, P = .012$ respectively. But gender and participation in co-curricular activities have an interactive effect on teachers' perception of students' participation in co-curricular activities $F(1,196) = 4.39, P=.022$. Consequently, the null hypothesis; there is no significant difference between gender and co-curricular participation and students' academic performance, was rejected.

The above results are further illustrated below by use of a Figure 1.6



Discussion and conclusions

This study contributes to the limited interdisciplinary research on students' co-curricular participation perception and their academic performance. More importantly is the contribution to the limited available research on the impact of co-curricular participation on academics in Kenya. The findings of the study indicated that the participants (students) in football were academically more superior to those who had participated in volleyball. These findings could imply that the participants may have over time learnt or developed some awareness or knowledge of the relationship between co-curricular participation and academic performance. It is Perhaps for this reason that Lopiano (2005, p. 64) advised students to study in the morning as the mind is fresh. After they return home from school they play for about one to two hours to relax and reduce stress and mental fatigue before they embark on studies. He further advised them to always remember the proverb, "All study and no play makes Jack a dull boy".

To determine the actual measures of relationship and establish whether the mean scores of the two groups of respondents were statistically significant an independent samples test was conducted and it was further revealed that participation in co-curricular activities has no significant relationship with academic performance, $t(194) = -1.36$, $p = .176$. Therefore, the null hypothesis was accepted. Other scholars who reported findings contrary to the present findings are Marsh and Kleitman (2002), Kevin and McCarthy (1997) and Ongonga et al., (2010). The findings revealed that the perception of students' towards academic performance fell within the researcher's three categories of perception in varying percentages. It was found that majority 117 (59.7%) of the participants had low academic performances, 38.3% had a neutral or average academic performance and only a paltry 2% of the participants had performed highly in academics. These findings indicate that expectations are far from consistent. On one hand the popular stereotype of the typical participant in sports as a "dump jock" persists according to Soltz (1994).

In addition these findings concurs with Landers, Felitz, Obermeier and Brouse cited in Sakwa (2003), who used empirical data/evidence to report that participation in co-curricular activities is indeed related to low academic achievement. This finding is consistent with Rehman's (2001) study which revealed that many students for example have difficulty in school, not because of low intelligence or poor eyesight, but because they have learned to consider themselves unable to do academic work. Consequently, it can be stated in reference to this findings that the

participants may have perceived themselves as unable to do academic work and therefore considered co-curricular participation as the only option to demonstrate their success at school.

With regard to the relationship between the participants' gender and their academic performance the mean scores also indicated that female students were slightly better in academic performance than their male counterparts. These findings are contrary to the findings of Gabelko, (1997), regarding gender differences in academic self-concept, that there is no evidence of such differences existing, and when such differences do occur, it is to the detriment of the girl (Hilke & Conway, 1998). The inferential statistics also indicated that gender has no significant effect on students' academic performance, $t(194) = -.12, p = .903$. Therefore, the null hypothesis was accepted. Similar findings were reported by Rehberg and Schafer (2002) that there is no significant relationship between extra-curricular participation and GPA in a number of high school males. Similarly, in a mixed sample of males and females, Spreitzer and Pugh (1998) failed to find a significant relationship between GPA and participation in extra-curricular activities.

Gender, Co-curricular Participation and Academic Performance

The results of analysis revealed that gender and participation in co-curricular activities statistically have no significant effect on students' academic performance, $F(1,196) = .69, P = .004$ and $F(1,196) = 2.28, P = .012$ respectively. But gender and participation in co-curricular activities have an interactive effect on teachers' perception of students' participation in co-curricular activities, $F(1,196) = 4.39, P = .022$. Consequently, the null hypothesis; there is no significant difference between gender and co-curricular participation and students' academic performance, was rejected. This finding is contrary to Tucker (1999) who reported that students who are more involved in high school competitive sports have higher grades, a higher self-concept, higher educational aspirations, a more internal locus of control and fewer discipline problems. Other scholars who also reported findings contrary to these findings are Marsh and Kleitman (2002), Kevin and McCarthy (1997) and Ongonga et al., (2010).

According to the results presented, the general perception of students towards co-curricular participation and academic performance was presented. The findings reported that students who participated in co-curricular activities performed below average at 59.7% (see Table 4.14) in academics. It was further revealed that participation in co-curricular activities has no significant relationship with academic performance, $t(194) = -1.36, p = .176$. This is a clear indication that co-curricular participation (football and volleyball) had no significant influence on the academic performance and cannot therefore supplement and extend those contacts and experiences found in the more formal part of the school program of the school day, especially the academic performance. Consequently, this result allows the researcher to conclude that measures ought to be put in place to make learning more interesting, active and vibrant without considering co-curricular participation.

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