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ADMINISTRATORS' CO-CURRICULAR MOTIVATION STRATEGIES AND STUDENTS' ACADEMIC PERFORMANCE AT PUBLIC TEACHERS TRAINING COLLEGES IN KENYA

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ABSTRACT

Research has demonstrated that what students do during their college impacts on their learning more than who they are or where they attended college. The purpose of this study was to investigate the extent to which college principals' motivation strategies on participation in co-curricular activities influence students' academic performance at public Primary Teachers Training Colleges in Kenya. The study employed cross-sectional correlational survey designs. The target population was 9,731 Second Year students in 25 public Primary Teachers Training Colleges that had presented students for Primary Teacher Examinations for at least two years prior to the study. Using multi-stage cluster random sampling techniques, systematic and purposive sampling methods, a sample of 11 colleges, 440 students, 11 principals and 11 games masters was selected. The researcher used semi-structured questionnaires, focus group discussion guides, and interview guides to collect data. Data were analysed through descriptive and inferential statistics. Results showed that motivational strategies used by

college administrators had a positive influence on students academic performance (β = .24, p<.001). It was concluded that co-curricular activities are an important facet in students' academic performance. The researcher recommended that colleges upgrade co-curricular facilities and offer modern games and sports besides the traditional ones.

Key words: *Participation, Co-curricular activities, Motivation strategies, Academic performance, Teachers Training Colleges*

INTRODUCTION

Motivation is a pre-requisite of and a necessary element for student academic performance. It is the driver of people's actions, desires, needs, or what makes a person to desire to re-do a certain behaviuor (Salamone, et al. 2012). Students' motivation, therefore, is the process whereby their desire to engage in co-curricular is energized, sustained and directed in order to meet individual needs and achieve academic objectives. Increased motivation, commitment and engagement levels are important to what students do and this contributes to high levels of performance (Aacha, 2010). One way of increasing students' performance is to motivate them to participate in co-curricular activities. Research has demonstrated that participation in co-curricular activities results to myriad of benefits to learners; both academic and developmental. Kisango (2016); Siegel (2008); and Wagner (2015) opine that the idea behind involvement in co-curricular activities is to develop strong character and personality in students and to train their minds in order to enhance academic performance. Zyngier (2008) adds that authentic participation in co-curricular activities leads to higher academic achievement throughout a student's life. If educators want to resolve young adults' issues and to make colleges engaging environments (Meyer, 2010), then they need to devise effective motivational strategies. Encouraging students to engage in co-curricular activities will result to healthy students with less delinquent behaviours, less stress, positive self-perception, self-confidence, and lifelong sports habits.

Rugg (2006) classified curriculum into two; core subjects taught in class and co-curricular activities. Haensly et al (1985) indicated that co-curricular activities is the "third curriculum," with the first curriculum being the taught curriculum and the second curriculum being the elective courses offered in a particular college. Other scholars feel that co-curricular activities make educational experiences whole. For example, Stanfort (2015) referred to co-curricular as the second half of education. Co-curricular activities are carried on outside of the class and may or may not have a direct relationship with the core curriculum. Such activities include; games and sports, clubs and societies and other hobbies designed to help the learner adjust socially and physically (Acquah & Anti Partey, 2014). Students do not earn academic grades or scores because of participating in co-curricular activities and such participation is voluntary (Bartkus, Nemelka, Nemelka, Phil Gardner, 2012).

Colleges are obliged to avail opportunities for students to engage in co-curricular activities (UNESCO, 2000). College administrators must therefore plan for different co-curricular activities throughout the year (Coven, 2015). They should introduce innovative and exciting co-curricular activities so that students experience optimal benefits (Halimah, 2010). This requires the principal to act like a director, recorder, evaluator, manager, decision maker, motivator, and coordinator for students to acquire optimal benefits from co-curricular activities (Chalageri & Yarriswami, 2018). Most students, parents and guardians show little regard to co-curricular activities. Educational administrators, at times have to persuade parents to allow their children to take part in co-curricular activities. Most parents feel that the after school activities divert children's attention from books and make them arrive late at home. Students also feel that all that matters in order to be successful in life is academic work

(Jackson, 2017). However, overtime students and their families have come to recognise that academic education alone is not adequate for one to succeed in the 21st century workplace (Hart Research Associates, 2005). To be successful in life, college graduates require intellectual resilience, cross-cultural, scientific and technology literacy, ethics, and have a readiness for continuous, cross-disciplinary learning (American Association of Colleges and Universities [AAC&U], 2007). Such qualities are inculcated through involvement in both formal curricular and co-curricular activities.

Indeed college impact research suggests that the best way to enhance student success is to focus on what they do in class and how they spend after-class hours (Pascallera & Terenzini, 2005; Whitt, 2006). Through involvement in co-curricular activities, students learn skills in communication, professional development, and group dynamics. Klesse (2001) adds that co-curricular activities have potential of providing students with a wide range of opportunities to hone their skills necessary for strategizing themselves for future careers. In addition, Adeyemo (2010); Anyango (2012); Kariyana, Maphosa and Mapuranga (2012); Marsh and Kleitman (2002); and Nyabero and Ngeywo (2018) all found that co-curricular activities promote school identification and commitment that in turn boosts academic performance. Nessan (2009) provides three reasons why students should be encouraged to participate in co-curricular activities; (a) prepare learners for the future life (b) expose learners to wide range of experiences where they will study, live and work once they leave school, and (c) participation in co-curricular can be an excellent opportunity to discover new meaning of life.

Motivation correlates with leadership. Effective leaders set examples, provide guidance, encourage those they lead and provide unambiguous instructions. Studies have shown that school administrators use a variety of strategies to support co-curricular activities. Administrators in public and private schools used motivation as catalyst to encourage students and teachers to participate in co-curricular activities at school level and other levels such as inter-district and provincial tournament. Through motivation, individuals willingly engage in some behaviour (Heneman et al. 1980).

Rewarding students is an important factor in motivation. Most educational institutions retain high student participation in co-curricular activities and consequently high academic success through well-balanced reward and recognition programmes for students. Motivation of students and their productivity is enhanced through effective recognition, which ultimately results in improved academic performance. At times, students initially get involved with a co-curricular activity lured by the rewards associated with it then they start liking the co-curricular activity when they start pursuing it. School administrators can include different competitions to reward winners at school level. UNESCO (2005) report recommended that rewards should be given to the most active participants. Therefore, the more students are rewarded, the more they participate in co-curricular activities hence improved grades. Freeman (2001) points out that competition motivates and strengthens feelings for a particular subject, provides enrichment skills in problem solving, perseverance and experimentation. Freeman further argues that during competitions students get opportunity to meet and interact with exhibitors from other schools and they are interviewed and judged by academics and experts in their chosen areas for competition where they are rewarded.

Rewards for participation in co-curricular can take different forms. Lazaro and Anney (2016) stated that schools in Tanzania held different competitions especially when welcoming form one students, wishing farewell to form four students, inter-dormitories and inter-classes competitions, where winners were given different rewards to motivate them. Students were rewarded with materials such as exercise books, textbooks, writing materials and uniforms. In addition, certificates of excellence were awarded to finalist students especially during graduation to enrich their Curriculum Vitae when searching for jobs later in life. However, Nessan (2009) argues that although school administrators motivate students in different forms, some of motivation rewards have no direct impact in developing an individual's talent in that particular co-curricular activity. For example, awarding students who

excel in football or netball with exercise books/textbooks and other academic materials instead of materials related to sports activities such as jerseys, pair of shoes, tracksuits to make that student excel more in sports might not be very appropriate. This notwithstanding, the implication is that most rewards are academically oriented for developing students academically. Such rewards were likely to increase students' academic performance.

College principals include interesting co-curricular activities in the school calendar; and this motivates students into participating in co-curricular activities. Students get involve willingly in the activities on the basis of their own interests and preferences. The principals should also understand the limitations of students and provide options to choose. Reynolds (1998) advices school administrators should arrange co-curricular schedules in such a way to accommodate learners optimally in addition to assigning teachers co-curricular responsibilities according to their competencies and interests. Reynolds further opines that all of these need to be steered by the school principal who is accountable for initiating, coordinating and motivating both learners and teachers to participate enthusiastically. This way, students learn things in the natural way and that enhances their academic performance.

The college principal is also charged with the responsibility for a safe environments that encourage learner participation in co-curricular activities. As a basic prerequisite, learners should be physically fit to participate in sports; team coaches should supervise and monitor learners constantly to prevent participation in any dangerous acts that may be harmful (Masteralexis et al, 2005). Yaacob and Haron (2013) also felt that directors and teachers accountability is important for students to build and strengthen their spirit in co-curricular activities that lead to individual success. When experts coach students, they feel motivated for they have trust in them. The college administrators should ensure that only experts coach and judge students co-curricular activities. One indicator of a well-designed co-curricular programme is that students enjoy getting involved in it and like identifying with it. They feel like they are a special group of a special something. Students get opportunities to create relationships with their coaches, tutors and peers (Brown, n.d).

Assigning teachers role in supervising co-curricular activities is another way of promoting co-curricular activities in schools. Lazaro and Anney (2016) while interviewing teachers and headteachers one headteacher asserted that teachers were part of school management and as implementers, supervisors and monitors of co-curricular activities; they were involved in the planning stage of co-curricular activities. When teachers were asked if the management involved them in planning and executing co-curricular activities, majority answered in the affirmative. This is in line with what was reported by UNESCO (2005) that school administration should be inviting and creating conducive environment for voluntary participation of students and teachers. Since successful implementation of co-curricular activities and subsequent benefits such as improved academic performance is dependent on teacher efforts, there is a need for strong collaboration between school administrators, teachers and students.

Other studies have reported low motivation efforts from school administrators towards co-curricular activities. Japhet (2010) found that headteachers and teachers hindered students' involvement in co-curricular activities and this hindered them from exploiting their creativity on types of activities where they had interest. In addition, Shehu (2001) reported that laissez faire attitude towards co-curricular activities by school administrators led to exclusion of many students from whole college experiences. Lazaro and Anney (2016) also found that some headteachers and teachers were not taking co-curricular activities seriously as indicated by poor conditions of playgrounds. Salamuddin, Harun, and Abdullah (2011) also found that many teachers considered co-curricular activities as an onerous task and they were less interested and motivated to carry them out. From the foregoing discussion, the researcher endeavoured to analyse the relationship between administrators' co-curricular motivation strategies and students' academic performance.

Null Hypothesis

There is no significant relationship between administrators'motivational strategies and students' academic performance in public Primary Teachers Training Colleges in Kenya.

Theoretical Framework

The study is guided by motivation theories, which explain that several factors influence a person' desire to work or behave in a certain way. Glasser (1990) Control Theory is based on the belief that no one can make anyone do anything; therefore it is the job of the manager to make it easy for workers to see a strong connection between what they are asked to do and what they believe to be worth doing. Glasser makes an industrial analogy between schools and workplace, stating that school should be made relevant and interesting because bored workers will not produce high quality work. In this case, college administraters should make the college environments interesting by promoting varied and interesting co-curricular activities.

This study is also anchored on Shanker's (1990) Theory of Student Motivation in which he adapted the principles of economics as postulated in the free market theory (capitalism) and the theory of the planned or command economy (communism) that can be utilized in directing people toward action. Shanker argues that incentives work, and they are a major motivator of individual and system's behaviour. College administrators should design motivational strategies to increase student participation in co-curricular activities. Just as in a free market system, this will result in a high level of academic performance.

Another relevant theory is McGregor's Theory X and Theory Y, which sets forth two alternative views of nature of man. In the first theory, Theory X, the assumption is that human beings are lazy and dislike work. Therefore, supervisors should direct, control and push those working under them. Theory Y views workers as people who are responsible and self-driven hence need no supervision or coaxing. McGregor states that a normal human being has initiative, likes work and should not be coerced to put effort, but should rather be motivated to improve their output. Theory Y suits this study in that college administrators should use different motivational strategies to encourage students to participate in co-curricular, thereby increasing academic performance.

All of the three motivational theories show the importance extrinsic motivation. Individuals need to feel a sense of achievement and are motivated by extrinsic acknowledgements of this achievement (Person, 1990). School administrators have a part to play in using their motivational strategies to get students to perform optimally.

RESEARCH METHODOLOGY

Research Design

The study adopted cross-sectional correlational survey designs. A cross-sectional design involves a one-time interaction with groups of people to collect information. The cross-sectional survey design was used because the independent variables had occurred in the participants prior to measuring their association with the dependent variable. Correlational research design was appropriate to the study for it enabled the researcher to find relationships between variables using a single study population and to find patterns that existed among the variables. Gall, Gall, and Borg (2007) opine that a correlational design allows the researcher to analyze relationships among a large number of variables within the context of a single study and to investigate how the variables either individually or in combination influence another variable(s). The design allowed the researcher to quantify, describe and characterize the phenomenon under study. Additionally, the researcher examined the relationships among the variables and determined the strength of the existing relationships.

Target Population

The target population was 9,731 Second Year students in 25 public Teacher Training Colleges that had presented students for Primary Teacher Examinations for at least two years prior to the study, 25 college Principals and 25 Games Masters (Economic Survey, 2017). The colleges were spread in eight administrative regions in Kenya; Central (5), Coast (1), Eastern (5), North Eastern (1), Nyanza (5), North Rift (4), South Rift (1) and Western (3).

Sample Size and Sampling Procedures

Using a Sample Size Calculator, a sample of 370 students was calculated. Multi-stage cluster random sampling techniques were employed to obtain study samples. In stage one, probability proportional to size technique was employed to select colleges from 8 administrative regions (370/40 = 9.25). Table 1 presents the number of public PTTCs sampled.

Table 1: Distribution of sampled colleges according to administrative regions

Region	No. of PTTCs	Sampling fraction	Sample size
Central	5	0.36	2
Coast	1	0.36	1
Eastern	5	0.36	2
North Eastern	1	0.36	1
Nyanza	5	0.36	2
North Rift	4	0.36	1
South Rift	1	0.36	1
Western	3	0.36	1
Total	25		*11

*The number of colleges increased due to rounding off the fractions and in regions where only one college existed, the college was picked to ensure representativeness of all regions. The formula used to arrive at the sample size per region was:

Sampling fraction = n/N (9/25 = 0.36)

Where n = desired sample size; and N = the target population

In stage two, 11 Principals and 11 Games Masters of the sampled colleges were purposefully picked. Finally, simple random sampling method with replacement was utilised to select two intact second year classes from each of the 11 colleges; one Science class and another Arts class. Following, 20 students were randomly selected from each class to complete questionnaires. A further 8 students were systematically drawn from second year students who had not participated in filling out the questionnaires for the focus group discussions. In total, 528 students participated in the study, that is, (40 x 11* = 440) + (8 x 11* = 88) = 528 students.

Data Collection Instruments and Methods

The researcher developed three types of data collection instruments including semi-structured questionnaires and a focus group discussion guides for students; and interview guides for the principals and games masters. Questionnaires help to reduce bias, enhance credibility and are important in gathering primary data from a larger number of participants within a short time. The students' questionnaire consisted both open-ended and closed-ended questions. Most closed-ended questions adopted Likert scales format. The unstructured items were

designed to gather demographic data of the students and to give students an opportunity to express their views on various issues related to their involvement in co-curricular activities.

The focus group discussion guide (FGD) solicited collective views and interpretations from students' experiences on co-curricular activities and academic performance. Through FGDs, the researcher was able to reach out to students who could have found personal interviews intimidating (Madriz, 2000). The creation of multiple-lines of communications created a safer, tolerant, friendly and permissive environment in which individuals freely shared ideas, concerns and perceptions in a company of people with similar characteristics.

The interview guides were used to gather information from principals and games masters. Pertinent issues on the extent of student engagement in co-curricular were solicited using this instrument. The semi-structured nature of the instrument guided the researcher on the core concepts to ask about and at the same time gave freedom to move the conversation in a direction of interest whenever an opportunity presented itself.

Validity and Reliability of the Research Instruments

Validity refers to that quality of a data-gathering instrument or procedure that enables it to measure what it is supposed to measure (Best & Kahn, 2011). Best and Kahn opine that instrument validity can be enhanced by expert judgement. If data collection instruments adequately cover the topics that have been defined as relevant dimensions, the instrument has good content validity (Cooper & Schindler, 2011). To ensure face, construct and content validity, instruments were scrutinised by three experts to ascertain if they would gather important, usable and necessary information (Cooper & Schindler, 2011). The experts were requested to comment on the clarity and appropriateness of the items. Important responses on every item from the panellist were judged against a content validity ratio. The items that met a statistical significance value of 0.7 and above were retained (Cooper & Schindler, 2011; Garner, 2010).

Reliability refers to stability or consistency of an instrument to give similar results after repeated administration (Sushil & Verma, 2010). In the study, test re-test method was employed where the same questionnaire was administrated on two occasions within a span of one week to the same students under the same conditions. This yielded two scores for each student and reliability coefficient was calculated using Pearson correlation co-efficient. Using the formulae, an $r = 0.83$ was obtained indicating a high positive correlation (Hinkle, Wiersma & Jurs, 2003).

For the interview guide and FGD guide, an inter-rater agreement level was established. Three raters independently interviewed principals and games masters and conducted discussions with students in one college. The items in the college principals' and games masters' interview guides were rated at 0.81 (81%) and FGD guide for students at 0.72 (72%). Therefore, all the three instruments met the threshold of 0.7 and above indicating that they were reliable for use in the data collection process during the main study (Landis & Koch, 1977).

Data Analysis Techniques

The researcher first scrutinised completed data collection instruments before analysis. This was done in order to determine if a reasonable return rate was achieved. Data analysis involved developing summaries, looking for patterns and applying statistical techniques. Qualitative data were analysed by categorising and indexing responses into common themes. Verbatim excerpts from the participants were used in the analysis to support specific arguments.

Qualitative data were analysed through use of Statistical Package for Social Science (SPSS) computer programme Version 23. To summarise and charactrise the data, descriptive statistics such as frequencies, percentages,

measures of central tendency, and measures of dispersion were calculated first. Following, inferential statistics like Chi-square test of goodness of fit and Chi-Square test of independence were used to test hypotheses at a .05 alpha.

RESULTS

The researcher distributed 440 questionnaires to students, and 400 were usable. In addition, 11 focus group discussions (100.0%), 9 (81.8%) and 8 (72.7%) face-to-face interviews were conducted with students, Games Masters and college Principals in that order.

Among the 400 students who participated in the study, 53.8 percent and 46.2 percent were male and female respectively. Slightly over half (57.5%) of the students fell within the age of 18 to 22 years (21.9 ± 1.55). Majority (88.8%) were single and ascribed to Christian faith (89.0%). An equal number of students 200 (50.0%) specialised in Science and Art subjects 200 (50.0%). Six (54.5%) colleges were located in semi-urban areas, 3 (27.3%) in urban areas and 2 (18.2%) in rural areas.

Students' Academic Performance

The dependent variable, students' academic performance, was measured using Continuous Assessment Tests (CATs) that were self-reported by the students. Primary Teacher Examinations (PTE) is both internal and external. The tests take three forms; CATs, Teaching Practice and a final examination administered externally by Kenya National Examinations Council. The CATs contribute 30 percent of the total marks while final examinations contribute 70%. College tutors at college level mark the CATs.

Students' overall average CAT score was calculated from both core and elective subjects. The core subjects comprised of English, Kiswahili, Professional Studies, Physical Education and Information Communication and Technology. Option A entails Science, Home-science, Agriculture, and Mathematics; and Option B; Music, Art and Craft, Social Studies, and Religious Studies. Student performance was categorised into three groups: high performance = 75% - 100%; average performance = 50% -74%; and low performance = less than 50%'. Table 2 presents a summary of the average scores.

Table 2: Self-reported average scores in Continuous Assessment Tests

Overall mean percentage marks in CATs	Frequency	Percent
50% - 74%	328	82.0
75% - 100%	72	18.0
Total	**400**	**100.0**

Results in Table 2 shows that majority of the students (82.1%) had an average performance of between 50% and 74%. Only 18% of the students were high performers (75% - 100%.

Influence of Administrators Motivation Strategies on Students Academic Performance Education administrators use several strategies to motivate learners into participating in co-curricular activities. To measure the influence of motivation strategies on student academic performance, a number of items were included in students' questionnaire and FGD guide. In addition, college principals and games masters gave their views on how motivational strategies influence students' academic performance.

Students rated the extent to which they felt their college principals motivated them to participate in co-curricular activities using a 1 – 5 Likert scale: 1 = Not at all; 2 = Small extent; 3 = Moderate extent; 4 = Great extent; 5 = Very great extent. Table 3 presents these findings.

Table 3: Students' rating on principals' motivation to students

Rating	**Extent college principals motivated learners in co-curricular activities**	
	Frequency	**Percent**
Very great extent	78	19.5
Great extent	200	50.0
To a moderate extent	58	14.5
Some extent	39	9.7
To a small extent	25	6.3
No extent	0	0.0
Total	**400**	**100.0**

As illustrated in Table 3, half (50%) of the students felt that their college principles motivated them to participate in co-curricular activities to a great extent and 78(19.5%) were of the opinion that they motivated them to a very great extent. None of the students felt that their principals did not motivate them. These positive ratings showed that principals supported co-curricular activities as a way of enhancing classroom learning.

During face-to-face interviews, the principals stated that they normally motivated learners to engage in co-curricular activities. They also said that they usually set annual budgets to support co-curricular activities. Games masters added that college administration largely motivated students into engaging in co-curricular activities. One Games Master contented:

> *My principal challenges students to take up a variety of co-curricular activities. Indeed, he readily provides transport whenever we require to attend competitions outside the college. Students who excel in the activities usually get material rewards and this motivates them to participate more.*

Student discussants expressed satisfaction with the way the principals encouraged them to spend their free time on gainful co-curricular activities. Learners felt they stood to gain a lot from participation. FGD participants agreed that college life was not just about passing examinations, but also about having fun and gaining new and exciting experiences. Some of the students had this to say:

> *Here in college, we have a variety of co-curricular activities and the college administration does not limit us to which clubs or sports one should join. When we have athletics, I participate in long distance races. I also play handball and volleyball. I am also a member of the Christian Union, Drama and Music clubs. This has not affected my performance because I still do well in class. (Student A)*
>
> *I belong to the Mathematics Club. Last term, as the club leader, I organised a contest in mathematics. The club patron and other mathematics tutors helped us a lot. The principal encouraged us to hold inter-class contests. I would say that the commitment with which we worked translated to good knowledge in mathematics. Personally, I realised an increase in my mathematics performance last term. (Student B)*
>
> *There is no point being in college and getting a good certificate and no good memories. I will not sacrifice my time. I need to have fun, make friends and create connections. This makes me feel a whole person. (Student C)*

As observed by Wynn and Ryan (1993), co-curricular activities that schools offer enable students to be engaged in many skillful and competitive endeavors. Such activities invite students to absorb and practice virtues necessary in their daily living. Thus, schools offering high levels of activities develop student character.

Students were further asked to indicate the kinds of motivational strategies their principals used. This was a multiple response question and responses are indicated in Table 4.

Table 4: Students' responses on motivation strategies used by principals

Motivation strategy	Response		Percent of cases
	Frequency	Percent	
Introduces interesting and innovative sports/games	256	13.8	64.0
Organises competition and rewards excellence in sports	390	21.2	97.5
Supports co-curricular endeavours; meals, transport to outside college competitions	386	21.0	96.5
Involves students and tutors in planning budget for co-curricular activities	105	5.7	26.3
Arranges and funds for co-curricular facilities	338	18.4	84.5
Engages students and games masters in choosing co-curricular activities for the college	367	19.9	91.2
Total	**1,842**	**100.0**	**460.0**

n = 400

As observed in Table 4, most students (1,842/400 = 4.6) ticked about five types of motivational strategies used by principals in encouraging participation in co-curricular activities. Most students cited competition and rewards (97.5%); and support such as provision of transport during out of college competitions (96.5%). The only motivational strategy that was rarely used by principals was involvement of students and tutors in planning budgets for co-curricular activities (26.3%).

Interviews with principals and games masters revealed that college administration challenged students to take part in co-curricular activities. The administrators clearly understand academic befits that result from such engagements. One principal said:

> *In my college, we provide many co-curricular activities designed to develop students talents and boost their academic grades. Students receive honors, awards and scholarships sponsored by different clubs and community sectors. Many become student leaders here in college. Participants become proficient in music, theatre, dancing, football and athletics. The students benefited much because of the innovative and interesting activities presented to them by the college.*

A games master from another college said:

> *When students are allowed to choose games to play, they become motivated. Most students look forward for inter-class and inter-house competitions. I teach English in several classes and I have noted that some of my good students are also active in the field. Maybe they exert the same energy in their books ...*

Chi-square test of goodness of fit was conducted to find out if some motivational strategies were more potent than others were. The Chi-square results are illustrated in Table 5.

Table 5: Chi-square test on potency of motivating strategies

	Motivation strategies and students participation in co-curricular activities
Chi-Square	14.217[a]
df	2
Asymp. Sig.	.001

The results of the Chi-square test of goodness of fit (χ^2 (2) > 14.217, p = 0.001) showed that the p value (0.001) was less than the chosen significant level (0.05). The results, therefore, indicated that some motivation strategies were more significant than others in driving students to participate in co-curricular activities.

Further exploration revealed that motivation strategies used by principals were related to student academic performance. This was confirmed through a Chi-square test of independence. It was premised that when learners get motivated and spend their free time on co-curricular, they exert themselves in the tasks and reap academic benefits. The findings are indicated in Table 6.

Table 6: Relationship between motivation strategies and academic performance

	Value	**df**	**Asymp. Sig. (2-sided)**
Pearson chi-square	23.320[a]	5	.04
Likelihood ratio	25.832	5	.259
Linear-by-linear association	.316	2	.574
No. of valid cases	400		

Results of the chi-square test of independence showed that p (.04) was less than the set level of significant (.05). Therefore, association was found between motivation strategies and students academic performance (χ^2 (2) > 23.320, df = 5, p = 0.04). These findings agree with the high number of students who participated in co-curricular activities.

Students were requested to indicate the reasons that greatly motivated them to participate in co-curricular activities. The type of motivation is expected to correlate with involvement in co-curricular activities. Intrinsically motivated students tend to participate more in co-curricular activities and are more committed. Students, therefore, were required to choose only one option from a given list. The responses are as indicate in Table 7.

Table 7: Reasons for students involvement in co-curricular activities

Reason	**Frequency**	**Percent**
Because of my friends/to socialise/ have fun/own interest	150	37.5
My principal/games master encourages me	115	28.8
For my future career/for my future education	63	15.7
To support my grades in current courses	72	18.0
Total	**400**	**100.0**

Most students (37.5%) indicated that they participated in co-curricular activities out of personal interest and to have fun and because their principals and games masters encouraged them (28.8%). The rest stated that they participated in co-curricular activities to improve academic work (18.0%) and to build future careers (15.7%). This shows that motivational strategies used by college administration had significant influence on student participation in co-curricular activities. Both intrinsic and extrinsic motivation factors were potent in driving students to participate in co-curricular activities.

Students were further requested to provide their opinions on the extent they felt co-curricular activities matched with academic curriculum and contributed to attainment of educational objectives. It was theorized that co-curricular activities had a direct impact on learners' academic performance. Students' responses are illustrated in Table 8.

Table 8: Matching of co-curricular activities to academic curriculum

Response	**Extent co-curricular activities match with curriculum**	
	Frequency	**Percent**
None match	9	2.2
A few match	83	20.3
Some match	133	33.3
Most match	108	26.8
All match	67	17.4
Total	**400**	**100.0**

As indicated in Table 8 most students (60.1%: 33.3% = some match + 26.8% = most match) were of the opinion that the types of co-curricular activities they engaged in were related to their academic subjects. Only 2.2 percent of the students said there was no relationship between the activities they engaged in and their academic subjects. This implied that, as much as possible, college administration was supporting and motivating students to engage in co-curricular activities that would boost their academic performance.

Another item in the questionnaire requested students whether they felt that the co-curricular activities they were involved in enhanced performance in their favourite subjects**.** A high number answered in the affirmative 359 (89.9 %). A Chi-square test of goodness of fit were calculated to test the extent to which students felt that co-curricular activities aided them to improve performance in their favourite subjects. Table 9 presents the Chi-square results.

Table 9: Relationship between co-curricular activities and favourite subject

	Most favourite subject	**Co-curricular activities improves performance in favourite subject**
Chi-Square	128.609[a]	199.957[b]
df	11	2
Asymp. Sig.	.000	.000

Results on Chi-square test of goodness of fit (χ^2 (2) > 128.609, p = 0.001) showed that the alpha value (.001) was less than the chosen significant level (.05). The results, therefore, indicated that co-curricular activities that students were participating in enhanced performance in their favourite subjects.

During the face-to-face interviews, the principals stated that they had annual budgets to support co-curricular activities and they used many motivation strategies to encourage students to participate n co-curricular activities. The most common form of motivation across all colleges was inter-house tournaments.

CONCLUSIONS

The interactions of the study variables showed that the motivational strategies used by college administrators were significant in improving students' academic performance. This meant that extrinsic motivators are important as drivers to behavior change. The findings confirmed McGregor's Theory Y that people are responsible and self-driven and only require to be motivated to improve their output. Glasser (1990) Control Theory finds support in these findings. Glasser opined that no one can make anyone do anything; therefore it is the job of the manager to make it easy for workers to see a strong connection between what they are asked to do and what they believe to be worth doing. In this case, college administrators made college environments interesting by promoting varied and interesting co-curricular activities. In addition, the findings proves Shanker's (1990) Theory of Student Motivation that incentives work, and they are a major motivator of individual and system's behaviour.

Recommendation for Policy and Practice

Based on the study findings, the researcher made the following recommendations.

1. College administrators at PTTCs need to continue to incorporate co-curricular activities in college programmes. Available literature and this study showed that students who are involved in co-curricular activities are more likely to achieve higher academic scores than students who are not involved in co-curricular activities. This was not true for every student, but it is apparent that there are other benefits of involvement in co-curricular activities other than high scores.
2. Administrators should continue supporting co-curricular activities in colleges and they should create awareness among students on benefits of particular types of co-curricular activities to assist them chose activities based on not only interest and attitude but also on aptitude. In addition, colleges should provide state of art co-curricular facilities and equipment to continue attracting learners to co-curricular activities.
3. The subject teachers should encourage students to join subject-based clubs that directly relate to college curriculum. In such clubs, students can extend classroom learning in a more relaxed environment. This would push more students into the 'high performers' bracket.
4. Colleges can look for sponsors and partnerships with the corporate organisations and business community to fund co-curricular activities. This is important as colleges can benefit from trainings from professional coaches and they can also get scholarships for further training and studies.

Recommendations for Further Research

Based on limitations and delimitations of this study, the researcher recommends that:

1. Researchers may attempt to replicate this study especially in other colleges where students of the same age bracket are found. This is because the scientific community accepts findings only to the extent to which they are replicable. By replicating this study, researchers may clarify issues raised during analysis or extend generalisability of the results.

2. Longitudinal studies including cohort, panels and tread studies should be done to track the impact of involvement in co-curricular activities on student academic achievements at various levels of education including primary, secondary and tertiary institutions in Kenya.

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