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A Correlational Study on Co-Curricular Activities and Academic Success at the University Level

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ABSTRACT

Students learn many skills from participation in co-curricular activities at the university level. Educational institutions aim to play an important role in enhancing students' mental and physical development. This research study investigates the relationship of co-curricular activities with students' academic achievement at the university level. A convenient sampling technique was used. The design of the research was quantitative. This research study has 540 BS students/prospective teachers from four public universities in Lahore. The researcher administered the instrument by herself. This research instrument was survey questionnaire developed by the researcher and name of research instrument was University Academic and Co-Curricular Activities Relationship Scale (UACRS). The questionnaire validity were evaluated by six experts ofInstitute of Education and Research, University of the Punjab. Researcher was selected 50 BS students for pilot testing of questionnaire.The reliability of overall questionnaire was calculated by Cronbach Alpha reliability method and it was found that α = 0.887. The research methodology was correlation. Statistical Package for Social Sciences (SPSS) used for data analysis. Data analyzed by using descriptive and inferential statistics. In descriptive statistics mean, standard deviation and frequency was used while in inferential statistics independent sample t-test and correlation coefficient. The finding of the present study was average students' participation in co-curricular activities, negative and insignificant correlation between co-curricular activities and students' academic achievement at university level. The outcomes of the study suggested that it is basic to ensure that students are well-informed about the co-curricular activities: academic/literary activities and sports/games activities accessible and the benefits they can determine from active participation.

Keywords:*Co-curricular activities, students' participation, students' academic achievement*

INTRODUCTION

Students learn many skills from participation in co-curricular activities at the university level. Co-curricular activities (CCA) provide a platform for developing students' academic achievement and a better environment. It gives them a chance to students to improve their academic achievements. Students who are willing to participate in any co-curricular activities and these activities are out of the curriculum. Co-curricular activities (CCA) provide a solid platform to develop students' skills, talents, and abilities. It gives them a chance to students to explore their interests.

CCA plays an essential role in the mental development of students. CCA has a significant role in the education system. Play is their psychological and physical exercise when students participate in all activities. On-demand sports use your mind and body, increasing your mental and physical abilities.
Coe et al. (2006) suggested that a perfect, healthy body and mind raise student learning experiences in class. Improved academic performance was related to the incredible action obtained outside of the school. The findings suggest that a potential role may exist for a great effort in physical instruction classes.

Although students did not perform better scholastically during the semester, they enlisted in physical education, and findings show that they did not appear in scholarly accomplishment compared with understudies who received an extra hour of academic instruction per day. Therefore, Coe et al. (2006) concluded that physical education classes help improve the academic performance of students.

Co-curricular activities have many benefits. But to achieve these benefits, the education system must be capable of achieving these goals and benefits. Educational institutions, their principals, and teachers should motivate their students to participate in co-curricular activities that make them aware of their benefits. According to the above given information, the provision of opportunities to participate in these co-curricular activities may lead to increased mental and physical development.

Khan& Iqbal (2014) highlighted that CCA could help improve "various domains of identity, intellectual advancement, and social progress. The responsibility of intuition is to enhance the student‘s learning skills. They also concluded that students want their institution to support their learning skills with curricular and co-curricular activities. Organizing different healthy activities for way better learning students must be required. Parents emphasized that different exercises and programs, along with co-curricular exercises, including dramas, speeches, and other healthy competitions, advance the school environment. Parents see co-curricular activities as excellent, beneficial curricular and co-curricular exercises, organizing activities including dramas, discourses, wrangles about, recreations, and other healthy competition in a taught way, to an expansive degree, promoting the institution environment and community involvement. In Pakistan's education system, we need to focus more on co-curricular activities because some people think they are a waste of time due to limited education and narrow-mindedness.Parents stressed almost their children because it was mostly accepted that those schools were fruitful, where most understudies had better picks up compared to schools where accentuation is laid on co-curricular exercises.

Mishra & Aithal (2023) explored that academic capabilities alone, through educational modules, are not adequate to adjust to the world. Extracurricular activities, coupled with co-curricular activities, can uphold the overall personality improvement of students. CCA and extracurricular activities provide various activities for students to become more involved in their own groups, which is the cause of the good relationships between them (students). These activities help students develop social, cognitive, and learning skills. These activities include events, competitions, coaches and training, and leadership roles in different ways e.g., captain of a team, lead as head of team, coach in sports and games activities, and volunteer roles in committees. CCA emphasis on learning, collaboration, leadership, communication and literacy skills. They also highlighted that CCA focuses on literacy and learning skills. They were mapping the activities with skills that CCA enhanced, such as the learning and literacy skills, while extra-curricular activities increased life skills, collaboration, social skills, and team management skills.

Mishra & Aithal (2023) concluded that extracurricular activities, such as sports, clubs, debates, dance, drama, etc., contributed to the development of personality skills. Co-curricular activities encompass not only academic curriculum but also involve competitions related to writing, speaking, and debates. Mishra & Aithal (2023) highlighted that participation in extracurricular activities led to an enhancement in academic grades. Whether in education or sports, CCA means speeches, writing competitions, general knowledge, and questions. However, all these co-curricular activities impact the students' mental development and academic ability.

Singh (2017) concluded that it can be observed that students, both boys and girls, exhibit differences in their academic performance across various subjects and also demonstrate variations in their engagement in co-curricular activities. The academic achievements of students in different subjects are positively

influenced by their diverse levels of participation in co-curricular activities. Notably, this impact appears to be more pronounced among girls when compared to boys. Their research findings suggest an overall positive correlation between co-curricular activities and students' academic performance and personality development.. Importantly, co-curricular activities are found not to hinder academic output; instead, they contribute to increasing students' knowledge and fostering a competitive spirit that strengthens their resolve in examinations. Furthermore, Singh (2007) concluded that students actively involved in co-curricular activities tend to adopt healthy habits and exhibit commendable potential for social adjustment.

Farman et al. (2018) concluded their research findings that students who participated in co-curricular activities, activities in the form of education or sports, however, affected student learning and GPA. They have mentioned nine types of co-curricular activities and describe the comparison and relationship of each co-curricular activity with the CGPA. Huang & Chang (2004) highlighted the findings of their research study that academics and CCA have a positive correlation and are linear. Stephens & Schaben, (2002) concluded that CCA is vital to students' academic achievement.

Significance of the Study

The present study is significant for the universities in Pakistan. This study aimed to identify the relationship between co-curricular activities and students' academic achievement at the university level. The recent study is beneficial when making educational policies at the university level so that universities know the importance of co-curricular activities for students, teachers, and educational institutions. Educational institutions and universities will realize that the actions we have proven contribute to the abilities and qualities of students' academic achievement. The present study provides advantages to the university administration and teachers; if they did not pay attention to CCA in the previous race, they will now pay attention to it and highlight its importance so that students participate not only in the academic field but also in co-curricular activities. The current research study is more significant for parents, who must encourage and support their children to participate in co-curricular activities.

Participating in co-curricular activities inside/outside of class can help students want to stay longer in the institution, which can lead to more students sticking around until they graduate. The importance of these co-curricular activities for student learning has been looked at from many different angles. Whereas, getting involved in these activities can have a positive effect on how well students do in their studies. (Jayanthi et al. 2014) (Carter et al., 2016).

In the present study, the primary objective was to investigate the relationship between co-curricular activities and students' academic achievement at the university level. Interestingly, the findings revealed a negative correlation between these two variables. This suggests that increased participation in co-curricular activities may be associated with lower academic achievement among university students.

This outcome is significant for several reasons: It highlights the need for students and educational institutions to maintain a careful balance between cocurricular engagements and academic responsibilities. Understanding this relationship can help students make informed decisions about how they allocate their time and efforts. For university administrators and policymakers, these insights are crucial. They suggest that while encouraging participation in co-curricular activities for their well-rounded development benefits, there should also be mechanisms in place to ensure that these activities do not detract from academic performance. This finding can serve as a valuable piece of information for student advisors and counselors. They can use this information to guide students in choosing and participating in co-curricular activities without compromising their academic goals.

Finally, the negative correlation invites further investigation. It is essential to explore why this relationship exists and under what circumstances co-curricular activities might impact academic achievement negatively. This could lead to more tailored co-curricular programs that align better with academic success.

Statement of theProblem

Students are an essential part of educational institutions and the country. Educational institutions aim to play an important role in enhancing students' mental and physical development. For development, students have to participate in cocurricular activities. Sometimes students join in curricular activities and quickly feel bored with the curriculum. At the same time, the solution to this boredom is to participate in co-curricular activities. Students participate in co-curricular activities with great interest. Participating in co-curricular activities has numerous benefits, such as achieving success, dedication, endurance, motivation, accepting defeat, cooperating with peers, participating in teamwork, etc.

In many Pakistani educational institutions, the focus of parents, teachers, and influential community members is heavily on academic achievements, viewing them as crucial for a student's future prospects. As a result, extracurricular and co-curricular activities often take a back seat. Despite the efforts of educational institutions to boost participation in such activities, achieving full engagement from students remains a challenge. It is widely acknowledged that academic learning enhances students' knowledge and skills, yet the impact of extracurricular and co-curricular activities involvement on academic performance in Pakistan's education system context is not well understood. (Abro et al., 2018) (Farooq et al. 2011). This research study was to explore the relationship between co-curricular activities and students' academic achievement at the university level.

Research Objectives

There are following research objectives to:

1. Investigate the level of prospective teachers/students‘ participation in co-curricular activities.
2. Explore the relationship between co-curricular activities and prospective teachers/students‘ academic achievement.
   - 2.1 Explore the relationship between prospective teachers/students‘ participation in academic/ literary activities and their academic achievement.
   - 2.2 Explore the relationship between prospective teachers/ students‘ participation in sports/games and their academic achievement.

Research Question

The research question is:

1. What is the level of prospective teachers/students‘ participation in co-curricular activities?

Research Hypotheses

The research hypotheses are given below:

1. There is a significant relationship between prospective teachers/students‘ participation in academic/literary activities and their academic achievement.

2. There is a significant relationship between prospective teachers/students‘ participation in games/ sports activities and their academic achievement.

Delimitation of the Study

The delimitation of this research study is below as:

1. This research study is delimited to different semesters of prospective teachers/ students of BS Education at the University of Punjab (PU), University of Education (UE), Kinnaird College for Women University (KCWU) and Lahore College for Women University (LCWU).
2. This research study is delimited to the Discipline of at University of Punjab (PU) Lahore, Department of Education, University of Education (UE) Lahore, Kinnaird College for Women University (KCWU) and Lahore College for Women University (LCWU), Lahore.
3. This research study is delimited to prospective teachers/ students‘ participation in sports/games activities.
4. This research study is delimited to prospective teachers/ students‘ participation in academic activities, e.g., speech, essay writing, exhibition, and quiz.

LITERATURE REVIEW

The present study has a primary purpose of exploring the relationship between co-curricular activities and the academic achievement of prospective teachers/students at the university level. This chapter begins a comprehensive analysis of education, education, and the learning role of students in the education system, co-curricular activities (CCA), their different types and role in education, the importance of CCA, and the need for CCA in Education and the relationship between variables. This chapter provides a related literature review and theoretical and conceptual framework to understand the role, importance, and effect of CCA on students‘ academic achievement at the university level.

Co-Curricular Activities

Co-curricular activities are a term that describes the kind of activities an educational institution has for students that relieve them of boredom from the curriculum. Co-curricular activities include quiz speech competitions, student counseling, scouting, sports, and indoor and outdoor activities that accompany the curriculum. All of our activities are found in schools, colleges, and universities and students of every swat can participate in it as per their wish.

Feldman (2016) concluded that he conducted interviews with the National Longitudinal Study of Adolescent Health during his research. His study showed that 70% of adolescents are involved in some co-curricular activities. Feldman also highlighted that participation in activities refers to school-based extracurricular activities in which adolescent high school students participate. They organized curricular, co-curricular, and extracurricular activities due to the support of schools, and the school allowed for evaluation of its community-based activities. Religious centers do not focus on these organized activities. They only participate in the activities that are being discussed and draw conclusions and compare these activities with school-based activities.

Co-curricular activities, while not integrated into the academic curriculum, are deemed integral to the educational institution's life. These activities encompass sports, school bands, student newspapers, etc., and may also fall under the classification of 'extracurricular,' indicating activities conducted outside the standard course of study or beyond the routine duties of a job, as in the case of extra class activities.

Cocurricular activities hold significance as, despite not being integral to the core curriculum, they play a pivotal role in empowering young individuals to shape their lives. School activities should be purposefully crafted to provide a balanced blend of student participation in academics and opportunities for comprehensive development. The significance of co-curricular activities cannot be overlooked. (Othoo & Omondi, 2022).

As per Othoo & Omondi (2022), Co-curricular activities offer various importance and benefits to the learner:

- Engaging in activities such as games, debates, music, and drama contributes to the overall functioning of education.
- Participation in co-curricular activities allows students to express themselves freely, particularly through debates.
- Involvement in games and sports helps learners maintain fitness and energy.
- Co-curricular activities create opportunities for socialization, self-identification, and self-assessment when learners interact with organizers, fellow participants, teachers, and individuals outside the school during cultural activities.

As per Singh, (2017) stated that co-curricular activities (CCAs), previously known as extracurricular Activities (ECA), are integral components of the educational framework in certain regions. These activities, mandated for all school students, were introduced in Singapore by the Ministry of Education. The rationale behind this policy is rooted in the belief that such extra activities contribute significantly to the enhancement of social interaction, leadership skills, healthy recreation, self-discipline, and self-confidence among students. At advanced educational levels, participation in CCAs may even translate into academic recognition. While the terms "co-curricular" and "extra-curricular" are grammatically distinct, the practical difference lies in their orientation—extra-curricular activities are more leisure-oriented and typically occur after school hours, often not directly complementing academic studies. Nevertheless, some activities blur the line between the two categories. The overarching goal of these activities is to foster the holistic development of students, equipping them to navigate the challenges of the future. Experiences gained through CCAs can prove beneficial in internships and other school-sponsored work programs, enhancing students' competitive spirit, cooperation, leadership qualities, diligence, punctuality, and team spirit. Moreover, competitions within these activities create a dynamic and competitive environment, fostering collaborative efforts towards a better society and world.

Benefits of Co-Curricular Activities

Co-curricular activities promote enthusiasm and enthusiasm in society so that these members can play their roles. Co-curriculum promotes positive thinking and team support. Along with co-curricular activities in personality development, it is also the responsibility of the institution administration to encourage these activities in their educational institution and attract students towards these activities. (Cornell & Drew, 2024; Lee, 2024; Cole, 2023).

Games/Sports Activities

Games and sports activities at the university level play a pivotal role in fostering physical fitness, teamwork, and a sense of healthy competition among students. These activities go beyond mere recreation, serving as integral components of the co-curricular landscape.

Universities often offer a diverse range of sports, from traditional team sports like football, basketball, and soccer to individual pursuits like tennis, athletics, and swimming. Participation in these activities not only promotes physical well-being but also nurtures essential life skills such as discipline, leadership, and resilience.

University-level sports events, tournaments, and intercollegiate competitions create a vibrant atmosphere, encouraging students to excel in their chosen sports and contribute to the overall spirit of camaraderie. Through games and sports, universities cultivate an environment that values holistic development, emphasizing the importance of both intellectual and physical prowess in the journey of higher education.

Student Involvement Theory By Alexander W. Astin

Othoo & Omondi (2022)research also focuses on the same areas as this current study. It examined students' involvement in co-curricular activities and how this impacts on their academic performance. This research was carried out in Kenya. It uses Alexander's theory of involvement in its theoretical framework, linking closely to the current study. The researcher referred to Othoo & Omondi research study to support that this theory deals with students‘ participation and involvement in cocurricular activities. This theory was key to current study for several reasons:

I. It highlights the importance of students putting effort and energy into reaching their learning and development goals.
II. It helps to see which types of involvement are important for achieving specific results.
III. It allows us to understand how much and what kind of student involvement can lead to certain improvements, like leadership skills, social skills, and learning.
IV. It looks into ways the school's programs, curriculum, rules, or methods can be designed to encourage students to get involved and achieve these goals.

Overall, this framework strongly supports the current study.

Introduction of Alexnader Theory of Students’ Involvement Theory

It is the theory of Alexander W. Astin that how students engage in higher education institutions to achieve desired outcomes. This theory shows how students develop in higher education institutions due to co-curricular participation. This theory consists of three elements.

First: the students' "input," their demographic background, or previous experience. Second, the student "environment" means all occasions students achieved during an educational institution/university. The third and final is "outcomes," which cover student characteristics, knowledge, attitudes, beliefs, values, and achievements that remain with students after graduation.

Figure 2.1

Core Concepts of Astin's Theory

Core concepts of Astin's Theory

Input
(Students' demographic background, or previous experience)

Environment
(Students' experiences achieve from educational institution/university)

Outcomes
(Students' skills attitudes, values, Achievement remain after graduation)

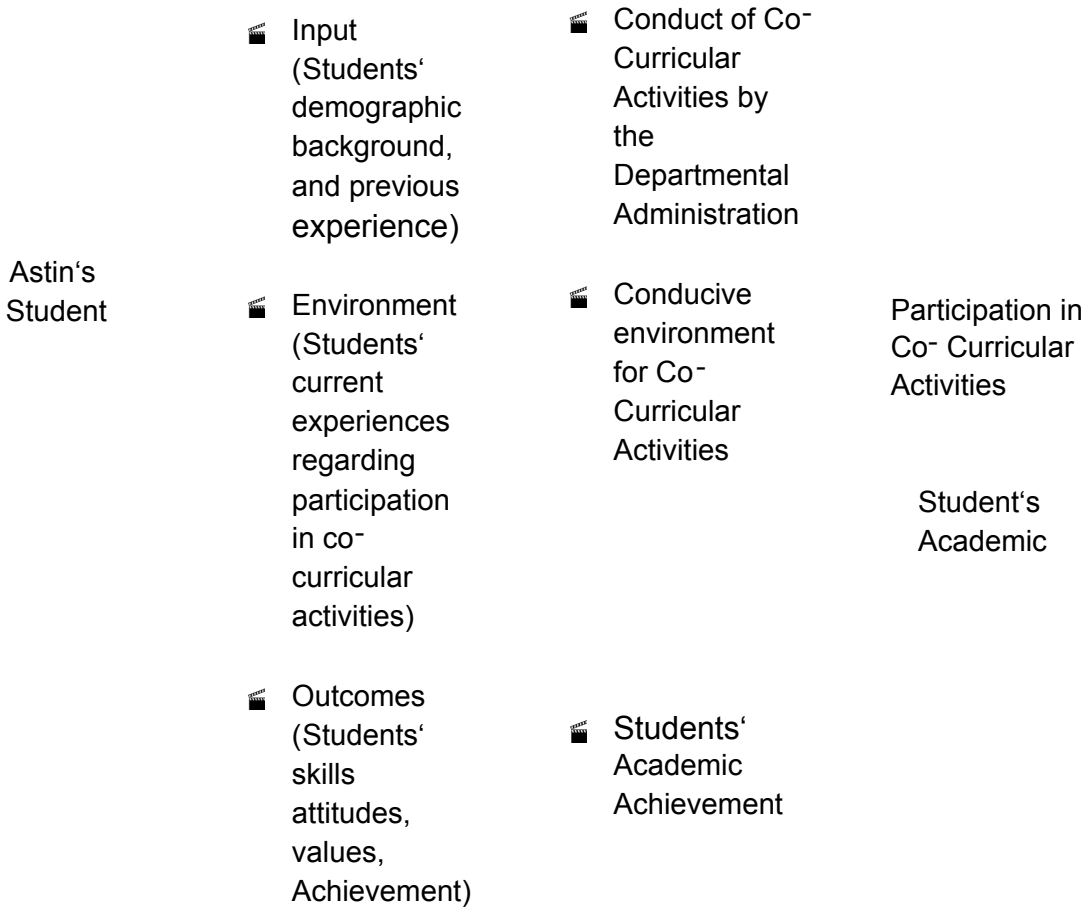
The above figure 2.1 highlights the core concepts of Astin's Student Involvement Theory. His theory includes three (3) core concepts e.g. input, environment and outcomes.

Othoo & Omondi (2022), study utilized Astin's theory of involvement, highlighted that students learn better when they take part in both schoolwork and social activities at college.

Theoretical Framework of Students' Involvement Theory

Figure 2.2

Theoretical Framework



The above figure 2.2 shows the theoretical framework of this present research study. The figure demonstrated the three (3) core concepts (input, environment, outcomes) of Astin's Student Involvement Theory. On the other side, the figure also heighted that how Astin's theory relate with current study.

RESEARCH METHODOLOGY

This chapter included the research procedure and method, which consist of the nature of the research, philosophical research paradigm, ethical considerations, population and sample, variables, instrument, validity, pilot testing, data collection, data analysis, and alignment table.

Nature of the Research

The relationship between co-curricular activities with the academic achievement of students at the university level was explored in the current study. The research design was quantitative in nature. Correlation research was used.

Philosophical Research Paradigm

This research has quantitative and descriptive. The survey research design used in this current study. So, this research study was followed the positivist philosophy research paradigm, which explored the relationship between co-curricular activities and students‘ academic achievement at the university level.

The Population of the Study

The population of this research study contained of all BS students/prospective teachers enrolled in the universities of Lahore. In Lahore, there are seven public universities.It was difficult for researcher to collect data from a large population. Consequently, the population in the current research study includes students/prospective teachers enrolled in the BS (Hons) degree program in Education at the public universities of Lahore. Therefore, the researcher randomly selected four (4) public universities in Lahore.

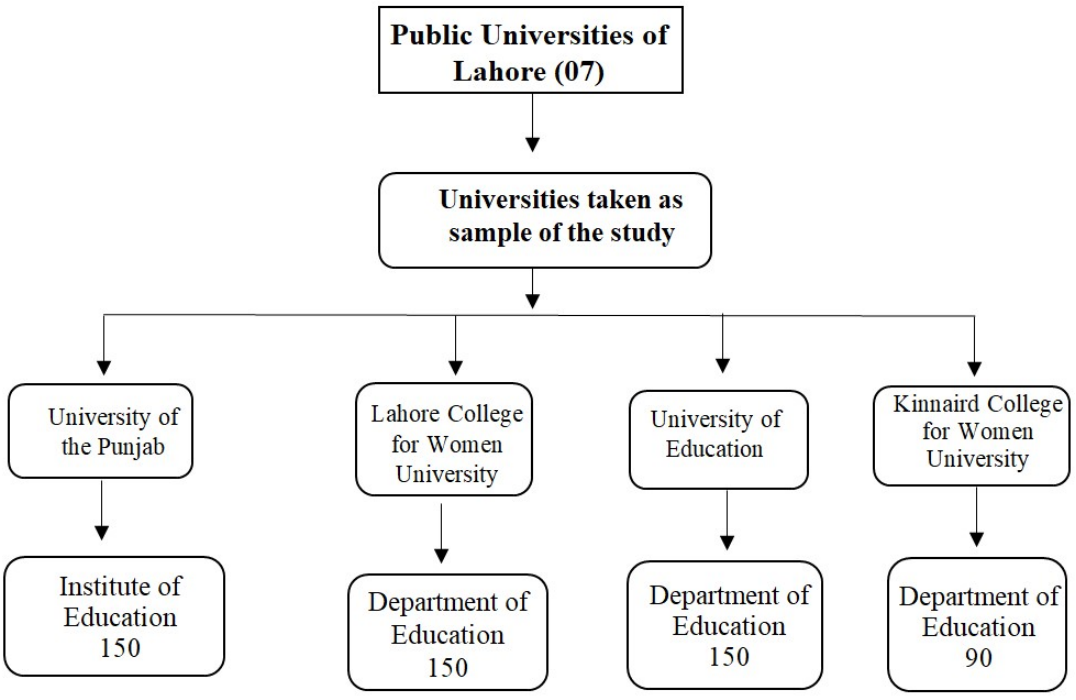
Target Population of the Study

There are seven public universities in Lahore. The researcher randomly selected four universities in Lahore. The target population of the study includes BS students/prospective teachers from the Discipline of Education at University of the Punjab Lahore, Lahore College for Women (LCWU), University of Education (UE), and Kinnaird College for Women University.

Sample of the Study

Figure 3.1

Sample of Study



y.

The above-mentioned figure 3.1 illustrates the sample of the present study, which shows that there are seven public universities in Lahore, and researcher chose four public universities as sample of the current study: that is University of the Punjab, Lahore College for Women University, University of Education and Kinnaird College for Women University.

Sampling Technique

At the first stage, the researcher chose purposive sampling because no one had studied the correlation between co-curricular activities and students‘ academic performance in the Pakistani context for prospective teachers/students before.

At the second stage, the researcher randomly selected universities because, out of 7 public universities, only 4 had prospective teachers/students. Therefore, these 4 universities were randomly chosen.

At the third stage, the researcher selected the education department from these universities and collected data from prospective teachers/students using convenient sampling. (Batool & Ahmad, 2020).

The study sample consisted of 540 BS students/prospective teachers from the Departments of Education at the University of Punjab, Lahore College for Women University, and Kinnaird College for Women University and the Division of Education from at the University of Education.

Instrument

The survey questionnaire was used as a tool for this study. The instrument was self-made by the researcher and under the instruction of her supervisor and the name of the research instrument was ―University Academic and Co-Curricular Activities Relationship Scale (UACRS). This research study has aimed to explore the relationship between co-curricular activities and the academic achievement of students at the university level. The academic achievement of the prospective teachers/students was measured through their CGPA. A Likert rating scale was used for this questionnaire. Cronbach" s Alpha was used for the reliability of this instrument.

The survey questionnaire for students has two main sections:

a) One is related to demographic information for prospective teachers/students.
b) Second, it is related to research objectives.

A Likert scale will be used, the codes of which are as follows: "Always,""Often,""Sometime,""Rarely", and "Never".

Pilot Testing of the Questionnaire

Researcher selected 50 BS students/prospective teachers for pilot testing of the questionnaire. The item analysis was done. The reliability of the portion of the research questionnaire about prospective teachers/students‘ participation in CCA items 1 to 7 is ($\alpha = 0.828$.)

The reliability of items 8 to 19 is about prospective teachers/students‘ participation in academic activities is ($\alpha = 0.852$.) The reliability of items 20 to 34 is about protectives teachers/students’ participation in games/sports activities is ($\alpha = 0.874$.)

The reliability of the overall questionnaire was calculated by Cronbach Alpha reliability method and it was found that ($\alpha = 0.922$.)

Table 3.2

Cronbach Alpha Reliability Coefficient by items

S. No	Items Number	Related to	Reliability
1	1-07	Prospective Teachers/ Students' Participation in CCA	0.828
2	08-19	Academic Activities	0.852
3	20-34	Games/Sports Activities	0.874

The above-mentioned Table 3.2 shows that Cronbach Alpha Reliability Coefficient by Items.

Table 3.3

Mean, Standard Deviation and Cronbach Alpha Reliability Coefficient

Mean	Standard Deviation	Cronbach Alpha Reliability Coefficient
3.265	64.67	.922

The above table 3.3 shows that mean, standard deviation and Cronbach Alpha Reliability Coefficient of overall research questionnaire.

The Procedure of Data Collection

The researcher purposively selected four public universities in Lahore. The researcher collected data from University of the Punjab, Lahore College for Women University, University of Education, and Kinnaird College for Women University. All the relevant

After selecting four universities of Lahore, the researcher purposively selected the Discipline of Education. The details of the assigned departments are as follows:

- Institute of Education and Research, Faculty of Education, University of the Punjab, Lahore.
- Department of Education. Faculty of Education, Lahore College for Women University, (LCWU)
- Department of Education, Division of Education, University of Education, Lahore.
- Department of Education, Kinnaird College for Women University, Lahore.

The researcher collected data by herself. The researcher used a convenient sampling technique for data collection. Researcher collected data from prospective teachers/students from the permission of the university administration.

The researcher obtained permission from the departmental administrations of the selected universities. After securing permission, the researcher herself attended the classes. The researcher requested permission from the teacher during the ongoing lecture, and data were collected from the prospective teachers/students in the last 15 minutes of lectures. The prospective teachers/students take about 15 minutes to fill out the questionnaire. The researcher read and explained the research questionnaire to the students once. Department administration, teaching staff, and prospective teachers cooperated.

Data Analysis

The researcher used descriptive and inferential statistical methods. Frequencies, mean, and standard deviation were used in descriptive analysis to discover the overall participation of prospective teachers/students in co-curricular activities.

The correlation coefficient and Independent sample t-test was used in the inferential analysis. Independent sample t-test was used to compare the mean scores of the participation of prospective teachers/students in CCA. The correlation coefficient was used to explore the relationship between co-curricular activities and students' academic achievement at the university level.

Research Objective: 1

Investigate the participation of students in co-curricular activities.

Research Question. 1

What is the status of students‘ participation in co-curricular activities?

Table 4.3

Mean and Standard Deviation of Students' Participation in Co-Curricular Activities

	Mean	Std. Deviation
Students‘ Participation in co-curricular activities	25.90	6.214

Table 4.3 provides insights into the current status of students' participation in co-curricular activities at the university level, level (M=25.90, SD=6.214). These findings shed light on the average level of involvement by students in co-curricular pursuits within the university setting.

Table 4.4

Independent Sample t-test for Gender wise participation of students in co-curricular activities

Gender	N	x	SD	T	Df	Sig
Male	79	25.51	5.597	-.612	538	.570
Female	461	25.97	6.317			

Table 4.4 indicates that an independent sample t-test was conducted to compare the participation in co-curricular activities (CCA) of male and female university students. There was no significant difference in scores of participation in CCA of male students (M=25.51, SD=5.597) and participation in CCA of female students (M=25.97, SD=6.317); t (538) = -.612, p=.570).

Research Objective: 2

Explore the relationship between co-curricular activities and students‘ academic achievement.

2.1 Explore the relationship between students‘ participation in academic/ literary activities and their academic achievement.

2.2 Explore the relationship between students‘ participation in sports/games and their academic achievement.

Hypotheses

a. There is a significant relationship between co-curricular activities and student‘s academic achievement.

b. There is a significant relationship between students‘ participation in academic/literary activities and their academic achievement.

c. There is a significant relationship between students‘ participation in games/

d. sports activities and their academic achievement.

Table 4.7

Correlation among academic/literary activities, games/sports activities and students' academic achievement

		CGPA
Academic/ Literary Activities	Pearson Correlation	-.036
	Sig. (2-tailed)	.403
	N	540
Games/Sports Activities	Pearson Correlation	-.060
	Sig. (2-tailed)	.167
	N	540

Significant level at the 0.05

Table 4.7 indicates that the relationship between co-curricular activities(academic/literary, games/sports activities) and students‘ academic achievement (CGPA) was attained by using Pearson product moment correlation coefficient. There was negative and insignificant relationship between co-curricular activities and students‘ academic achievement: academic/literary activities: r= -.036, n=540, p>.05 and games/sports activities r= -.060, n=540, p >.05.

The result shows that there is negative relationship between co-curricular activities and students‘ academic achievement that‘s mean when student participate in CCA and not participation in CCA there is no relationship exist on students‘ academic achievement. This result indicates that students was gave attention to their studies rather than CCA activities.

SUMMARY, FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

This chapter includes a brief summary of the current study, findings based on the study a conclusion about, conclusion according to the findings, a discourse and suggestions. The summary gives a brief view

of what was done in this study. The conclusion is about the relationshipbetween the findings of the present study, literature. An overview of present study and suggestions for future research.

SUMMARY

The purpose of the study was analyze to the relationship between co-curricular activities and students' academic achievement at the university level. The objectives of the current study were to investigate the relationship between co-curricular activities and students' academic achievement at the university level. It was a correlation study. The research was quantitative in nature, survey questionnaire was utilized to gather information. The population of the study was all male and female students from four public universities in Lahore. A convenient sampling technique was used in this research study. The sample size of the current study was 540 (461 female and 79 male) from four public universities in Lahore. The instrument was self developed under the instructions of the supervisor. The instrument was consisted of 34 items with five Likert scale. Validity of the research instrument was checked by 6 experts, and Cronbach Alpha was utilized for the reliability of the research instrument. Data were analyzed through Statistical Package for social sciences (SPSS) version 26. Percentage, mean, and standard deviation were included in descriptive statistics. An independent sample *t-test*, and Pearson product moment correlation coefficient were applied to examine the relationship between co-curricular activities and students' academic achievement at university level. Major finding of that there's a negative and immaterial relationship between co-curricular exercises and students' academic achievement at university level. The details of finding of the present research study are given below.

FINDINGS

There are following findings of present research study:

1. It is determined that the mean scores University of Punjab (N=150, M=3.65, SD=1.015), University of Education (N=150, M=3.70, SD=.801) and Lahore College for Women University (N=150, M=3.90, SD=.809) was almost same but the respondent from Kinnaird College for Women University (N=90, M=3.48, SD=1.104) was less than from three universities.

2. It is explained that there was no significant difference in scores of participation in CCA (p=.570).
3. It is confirmed that there was negative and insignificant relationship between academic activities and students‘ academic achievement. (r= -.036, n=540, p>.05).

4. It directed that there was negative and insignificant relationship between games/sports activities and students‘ academic achievement.(r= -.060, p >.05).

DISCUSSION

The main aim of the study is to investigate the relationship between cocurricular activities and students‘ academic achievement at the university level. The researcher selected four public universities in Lahore. The sample size consisted of 540 male and female students four public universities in Lahore.

It is stated that the means scores of universities indicates that University of the Punjab, University of Education, Lahore College for Women University were well received, but Kinnaird College for Women University has a lower mean score.

It was found that there were no significant scores of participation by students in CCA. It was found that there was a negative and insignificant relationship between academic activities and students‘ academic achievement. It was investigated that there was a negative and insignificant relationship between games/sports activities and students‘ academic achievement.

Othoo & Omondi (2022), study has the same variables as the current study. In the current study, student participation is moderate, and there's a negative correlation between co-curricular activities and student academic achievement. Othoo &

Omondi‘s study showed positive results, meaning that students' involvement in cocurricular activities has an impact on their academic performance.

The difference between the results of the current study and the previous study might be due to several reasons. First reason could be that Othoo & Omondi's study was conducted in a school in Kenya, and it took place after COVID-19. During COVID-19, students attended online classes, and after COVID-19 educational institutions reopened, students participated in co-curricular activities with much enthusiasm. Therefore, students involvement in co-curricular activities higher than current study level of students‘ participation in CCA.

Second reason could be that Othoo & Omondi's study used mixed methods (both quantitative and qualitative research).

Third reason might be that Othoo & Omondi‘s study looked at the impact, whereas the current study is looking at the relationship (correlation).

Lastly, the target population in Othoo's study was public secondary school students and teachers, while the current study is focused only on prospective teachers/students.

Tahir et al. (2021) research study based on co-curricular activities and its relationship with academic performance. They have specifically types of academic/literary activities mostly same activities those activities are mentioned in current research study like debate, essay writing competitions etc. Their research study found that negative and not statistically significant relationship between academic performance (CGPA) and debate. It was supportive result for current research study.

Chambers & Schreiber (2004) research found that only curriculum would increase students‘ academic achievement and non-academic activities such as cocurricular activities are not beneficial for students‘ academic achievement.

Mishra & Aithal (2023) found that extra-curricular and co-curricular activities enhance literacy and social skills. Their research study found that students have better empirical learning when students participate in extracurricular activities and cocurricular activities. When students participate in academic activities, they have learned new task and enhanced task- oriented skills, collaboration, team management and time management skills. They concluded that through positive reinforcement activities, students enjoy hearing their own voice and experiencing resounding success. Transforming each event into a enjoyable experience can facilitate more meaningful learning. Allowing students additional discussion time for exploring and refining ideas is essential. However, there is a concern among some that allocating excessive time to debates may impede the coverage of necessary content. In reality, both engaging in debates and forming opinions on a topic contribute to enhanced learning and memory. Mishra & Aithal (2020) founds that those students who participate in extracurricular/ co-curricular activities are physically fit and also they are active in cognitive skills and response all questions.

Batool & Saghir (2020) highlighted that students who participate in such activities (CCA) have high scores (CGPA) instead of those who are not participating in CCA. Their study explored that CCA has a positive relationship and effect on students' academic achievement.

Several research studies have explored the correlation between co-curricular activities and students' academic achievement. (Ahmad, M. et al, 2019; Daniyal, M. et al, 2012; Abro, A. M. et al, 2018). However, current research study yields different results from other studies. The present research indicate a negative correlation between co-curricular activities and students' academic achievement at the university level. It means that specific detail of students (demographic information) is different from those research studies who found positive correlation between co-curricular activities and students‘ academic achievement. Students that included in present research study might be different from students talked about in other research studies in literature. These differences can be in many things - like how old they are, whether they come from cities or villages, how much money their families make. These differences - like where they're from, how much money their family has, or their education level - can change how co-curricular activities affect their grades. The relationship of co-curricular activities on their grades might also look different.

The research project of Rahman et al. 2021 named is Effects of co-curricular activities on student‘s academic performance through machine learning, almost same variable as present study, but their aim was to explore the effect of co-curricular activities on a student‘s academic performance. In the end of the study they concluded that there is a positive relationship between co-curricular/ extra co-curricular activities and students‘ academic achievement, but they have different research methodology and large sample size which is different from current research. It is might possible that present research study has different result from above mentioned study.

The present study has different result from other studies based on literature is that co-curricular activities has different nature like in present study, researcher is mention the games/sports in generally terms not in specific terms/types such as Tahir et al. (2021), Farman et al. (2018), Ahmad et al. (2015) have used specifically types of games/sports activities and academic/literary activities like: photography club activities, cultural & debate club activities, medical carnival activities, calligraphy activities, volley ball, football, cricket, badminton. In the present study, researcher has not use specifically terms of activities because studies are mentioned in literature mostly international studies such as Ahmed et al. (2015) study is related from Dhaka, Bangladesh. So, there is less scope of above mentioned activities in Pakistani context/educational sectors. Pakistan has different cultural from other countries.

Therefore, researcher used the word ―generally terms of games/sports activities in operational definition. However, it is might possibility that present research study has different result from other results of in the context of difference in nature of cocurricular activities. It's might possibility that current research study is different from other research studies in terms of methodology, instruments, tools, and analysis methods.

For example, to measure the relationship between variables, researcher used the Pearson r correlation, while Ahmad et al. (2015) used the Pearson chi-square in their research project, which was a cross-sectional study. Meanwhile, current study is correlational and quantitative. Another study by Rahman et al. (2021) used Logistic Regression with Python and Google Colab to look at the correlation. Similarly, there's a study by Singh, in 2017, which used a checklist as a tool. All these research studies mentioned are different from my research study.

The results of current study might be different from other research studies because of cultural or contextual factors. For example, in a study by Chambers & Schreiber (2004), they looked at girls' academic achievement and their participation in extra co-curricular activities. They found a positive correlation, meaning that as girls participated more in these activities, their academic achievement also went up.

However, in current study, researcher included both male and female students. This difference might be why the results of present study are different from other studies.

CONCLUSION

In conclusion, the study on the relationship between co-curricular activities and students' academic achievement at the university level yields several critical findings.

Firstly, the observed average level of students' participation in co-curricular activities at the university level suggests moderate engagement. While this signifies baseline involvement, it also prompts further exploration into strategies for enhancing and diversifying participation, aiming for more robust and inclusive co-curricular environment. The moderate level of students' participation, while indicating a baseline engagement, prompts a call for strategic interventions to elevate and diversify involvement. Initiatives aimed at promoting a wider array of co-curricular options, tailoring activities to diverse interests, and addressing potential barriers to participation can contribute to a more vibrant and inclusive university community.

Finally, the identified negative correlation and insignificant role of both academic/literary activities and games/sports activities raise questions about the traditional assumptions regarding the direct impact of these activities on academic achievement. This challenges the conventional belief that high involvement in such activities unequivocally translates into enhanced academic performance. Further research and nuanced examination are warranted to unravel the complexities of this relationship and to understand the specific dynamics at play. The revelation of a negative correlation and an insignificant role for both academic/literary and games/sports activities challenges the dichotomous perspective on these pursuits. It underscores the need for a nuanced understanding of the interplay between academic and co-curricular realms. Educational institutions might benefit from fostering an integrated approach where academic and co-curricular aspects complement and reinforce each other, rather than being viewed in isolation.

In essence, the study underscores the need for a holistic approach in evaluating the connection between co-curricular activities and academic achievement, acknowledging the multifaceted nature of student engagement and the varied influences on their overall university experience.

RECOMMENDATIONS

There are the following recommendations:

a. It is basic to ensure that students are well-informed about the co-curricular opportunities accessible and the benefits they can determine from active participation. This may be achieved through introduction sessions, workshops, and informative materials. Clear and viable communication about the value of co-curricular activities can encourage more prominent participation.

b. Encourage co-curricular advisors and academic advisors to assist students in adjusting their commitments successfully.

c. Acknowledging exceptional achievements in co-curricular activities alongside academic achievements is significant. Scholarships, awards, and certificates can serve as capable motivations to motivate students to effectively engage in co-curricular interests. By recognizing these achievements, universities can strengthen the value of a balanced education that includes both academic and non-academic achievements.

d. To ensure that co-curricular activities cater to a wide range of interests and backgrounds, it is basic to differentiate the offerings. Universities should effectively look for and create a variety of clubs, organizations, and events that resonate with the differing student bodies. This inclusivity guarantees that each student, regardless of their background, finds opportunities that align with their passions and personal development goals.

REFERENCES

Abro, M. A., Shah, A.A. & Shah, S. S. (2018). The NEXUS between Co-Curricular Activities and Academic Performance: A Case Study of Higher Secondary Schools of Kamber, Shahdadkot. *New Horizons*, *12*(2), 33-43, doi:10.2.9270/NH.12.2(18).03

Ahmad, M., Rehman, M, F., Rahman, F. N., Ali, M. & Azad, S. (2015). Effect of Extra Curricular Activity on Student‘s Academic Performance. *Journal of Armed Forces Medical College Bangladesh, 11*(2), 41-46, doi: 10.3329/jafmc.v11i2.39822

Batool, A. & Ahmad, S. (2020). Correlation between Co-Curricular Activities and Academic Achievement of Students. *Journal of Education and Practice, 11*(1), 15-19, doi: 10.7176/JEP/11-1-03

Carter, D. F., Ro, H. K., Alcott, B., & Lattuca, L. R. (2016). Co-curricular connections: The role of undergraduate research experiences in promoting engineering students‘ communication, teamwork, and leadership skills. *Research in Higher Education*, *57*(3), 363-393, doi: 10.1007/s11162-015-9386-7

Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J., & Malina, R. M. (2006). Effect of Physical Education and Activity Levels on Academic Achievement in Children. *Medicine & Science in Sports & Exercise,38*(8), 1515-1519, doi.org/10.1249/01.mss.0000227537.13175.1b

Cole, L. (2023, August 08). 36 Co-Curricular Activities (Examples & Benefits). *MentalUp*https://www.mentalup.co/blog/co-curricular-activities

Cornell, D. & Drew, C. (2024, January 03). 55 Co-Curricular Activities Examples. *HelpfulProfessor.com*. https://helpfulprofessor.com/co-curricular-activitiesexamples/

Chambers, E. A., & Schreiber, J. B., (2004). Girls' academic achievement: varying associations of extracurricular activities, Gender and Education, *16*(3), 327-346, doi: 10.1080/09540250042000251470

Daniyal, M., Nawaz, T., Hassan, A., & Mubeen, I., (2012), The Effect of CoCurricularActivities on The Academic Performances of The Students: A Case Study of The Islamia University of Bahawalpur, Pakistan, *Bulgarian Journal of Science and Education Policy, 6*(2), 257-272

Farman, Z., Tahir, T., Ishfaq, U., & Saeed,M. (2018), Co-Curricular Activities and its Impact on the Academic Performance of Students at University Level, https://www.researchgate.net/publication/325619977_Co-Curricular_Activities_and_its_Impact_on_the_Academic_Performance_of_Students_at_University_Level

Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). Factors Affecting Students‘ Quality of Academic Performance: A Case of Secondary School Level. *Journal of Quality and Technology Management*, *7*(2), 1-14.

Feldman, A. F. & Matjasko, J. L. (2016). The Role of School-Based Extracurricular Activities in Adolescent Development: A Comprehensive Review and Future Directions. *Review of Educational Research, 75*(2), 150-210, doi:10.3102/00346543075002159

Huang, Y. R. & Chang, M. S. (2004). Academic and Co-Curricular Involvement: Their Relationship and the Best Combinations for Student Growth. *Journal of College and Student Development, 45*(4), 391- 406,*https://www.researchgate.net/profile/Ya-Rong-Huang-3/publication/236696710_Academic_and_Cocurricular_Involvement_Their_Relationship_and_the_Best_Combinations_for_Student_Growth/links/54fefcbd0cf2672e2240e594/Academic-and-Cocurricular-Involvement-Their-Relationship-and-the-Best-Combinations-for-Student-Growth.pdf*

Khan, W. & Iqbal, M. (2014). Role of Co-Curricular Activities in School Effectiveness. *Middle-East Journal of Scientific Research,21*(11), 2169-2176,doi:10.5829/idosi.mejsr.2014.21.11.21841

Lee, B. (2024, January 09). 12 Best Co-curricular Activities: Types, Benefits & More.

Mishra, N., & Aithal, P. S. (2023). Effect of Extracurricular and Co-Curricular Activities on Students‘ Development in Higher Education. *InternationalJournal of Management, Technology, and Social Sciences,8*(3), 83-88, doi: https://doi.org/10.5281/zenodo.8190054

Othoo, H. O. & Omondi, K. (2022). Impact of Students‘ Involvement in CoCurricular Activities on Academic Performance in Gem Sub County, Siaya County, Kenya. *Journal of Research Innovation and Implications in*

Education, 6(2), 131 – 139

Rahman, S. R., Islam,M. A., Akash, P. P., Parvin, M., Moon, N. N. & Nur, F. N. (2021). Effects of Co-Curricular Activities on Student's Academic Performance by Machine Learning. *Current Research in Behavioral Sciences, 2,* 1-7, https://doi.org/10.1016/j.crbeha.2021.100057

Singh, A. (2017). Effect of Co-Curricular Activities on Academic Achievement of Students. *IRA International Journal of Education and MultidisciplinaryStudies,* 6(3), 241-254. doi:http://dx.doi.org/10.21013/jems.v6.n3.p4

Stephens, L. J. & Schaben, L. A. (2002). The Effect of Interscholastic SportsParticipation on Academic Achievement on Middle Level School Students. *National Association of Secondary School Principals Bulletin, 86*(630), 34-41.

Tahir, T., Aurangzeb, W. & Ishfaq, U. (2021). Co-Curricular Activities and Its Relationship with Academic Performance. *Elementary Education Online, 20*(4), 1398-1406, doi: 10.17051/ilkonline.2021.04.157

Jayanthi, S. V., Balakrishnan, S., Ching, A. L. S., Latiff, N. A. A., & Nasirudeen, A. M. A. (2014). Factors Contributing to Academic Performance of Students in a Tertiary Institution In Singapore. *American Journal of Educational Research*, *2*(9), 752-758.