Measuring the Difference of Impact of Co-Curricular Activities on Students' Learning Skills at the Public Middle Schools of Karachi

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ABSTRACT

This research was conducted to measure the difference of impact of co-curricular activities on students' learning skills at the public middle schools of Malir Town, District Malir, Karachi. This study specifically focused on the learning performance, learning abilities, and learning activeness between male and female students in the middle-level public school in Malir town. The in-depth analysis of the literature review was employed to support the problem of the study. The strategy of the research was quantitative and the population of the study was limited to Public Middle-Level Schools in Malir Town. Moreover, a set of questionnaire was formulated for students. The sample size of students was limited to 120. Due to the heterogeneous population, simple random sampling was used to collect the data and the data was analyzed through inferential statistical tools by employing Independent t-test on Statistical Packages of Social Sciences (SPSS).The findings of the research revealed the fact that the male students have significantly higher learning skills and learning abilities as compared to female students. The finding also indicated that the co-curricular activities were not being conducted effectively, as the teachers lacked motivation and training to contribute.

Keywords: *Co-curricular Activities, Middle School, Malir Town*

INTRODUCTION

This chapter presents the introduction of the study that investigated Measuring the Impact of Co-Curricular Activities on Learning Skills among Students at the Public Sector Middle Schools of Karachi. It should be noticed that co-curricular activities have an influential and irrefutable role in the overall development of students and such activities hold a pivotal position in the school program in the present day. According to Zada, N.Y. (2021), Co-curricular activities facilitate students in achieving their life goals, boosting their decision-making ability, strengthening their self-confidence, forming social bonds, increasing their capacity to overcome challenges effectively, cultivating team spirit, developing the spirit of commitment, and benefiting about others' perspectives. In Malir Town, currently, there is no comprehensive research on the effectiveness of co-curricular activities on students' overall development.

Statement of the Problem

The role of co-curricular activities in the modern education system is crucial as it significantly impacts the overall development of students. This study aims to highlight the key aspects of co-curricular activities and

advocate for their expansion. The findings of the study will contribute to the improvement of education, particularly in the Public Sector of Middle Schools in Malir Town, Karachi.

Rationale of the Study

This study is focused on assessing the impact of co-curricular activities on student development. Currently, there is a lack of specific research on CCA in Malir town. This topic holds tremendous significance for the development of students' skills. Lastly, it is essential to analyze the outcomes of co-curricular activities.

Objectives of the Study

I. To analyze the difference of co-curricular activities on the learning performance between male and female students at the middle level of public schools in Malir Town.
II. To evaluate the impact of co-curricular activities on students' learning abilities between male and female students at public middle-level schools in Malir Town Karachi.
III. To explore the difference of co-curricular activities on learning activeness in the classroom performance between male and female students at middle-level public schools in Malir Town.

Hypotheses of the Study

I. There is no significant difference of co-curricular activities on students' learning performance between male and female students at the middle level of public schools in Malir Town.
II. There is no significant difference of co-curricular activities on the learning abilities between male and female students at the middle level of public schools in Malir Town.
III. There is no significant difference of co-curricular activities on learning activeness in the classroom performance between male and female students at middle-level public schools in Malir Town.

Significance of the Study

This study highlighted the significance of co-curricular activities on the student's learning performance. This study will also strengthen the area of co-curricular activities and emphasize their existence in the development of students. Moreover, the findings of the study will support the enhancement of education and will help others work in this domain in the public sector middle schools of Malir Town.

Scope of the Study

The scale of the study was limited to Public Sector Middle Schools of Malir Town of District Malir, Karachi.

LITERATURE REVIEW

Co-curricular activities are regarded as activities or engagements that help to enlarge and increase the customary curriculum in the course of regular school hours. CCAs also are known as extracurricular, extra-class, non-class, school-life, and scholar sports (Tan & Pope, 2007). The co-curricular activities are divided into formal and informal activities. The former activities engaged the participation of students in sports, theater, debate competitions, etc. Conversely, the latter dealings such as listening to music or watching television are categorized as informal activities.

In the modern era, Education arrangement places more attentiveness on the essentiality of co-curricular activities such as moral, emotional, physical, intellectual, psychological, and social development. Basher

(2012) established that CCAs are vital for the psychological and physical advancement of learners since both features of advancement are the major aims of instruction.

Khan and Iqbal (2014) enlightened that in the Pakistan schooling framework, generally CCAs are not regularly and professionally enforced because of the less education of people as they consider it just wastage of time and they largely focused on their children's exam related outcomes. Reeves (2015) figured that the learners who participated in three to four CCAs during the academic year outperformed those who did not take part in CCAs in terms of academic performance.

Siddiky, M. (2020) asserted that co-curricular activities aid in enhancing the development of soft skills, including social and individual-based skill advancement. Dr. Devi Annu (2021) advocates that the boys are more active physically as compare to girls. The girls, often and again, feel shy in physical activities especially in front of others. In comparison with girls, boys have less degree of shyness as they are more energetic and are inclined to take participate in such activities. As a result, boys feel fit and stronger than girls.

The impact of CCAs on Leadership

Ghani A. et al, (2020) elaborated that all aspects of leadership including communication and teamwork are indirectly generated through regular involvement in structured activities and co-curricular activities such as football; rugby and etc. activities are conducted and facilitated by schools.

The contributions of co-curricular activities to student's acquisition of soft skills

According to Doyle A. (2020) published on the banana careers website, soft skills are non-technical skills that relate to how you work. Soft skills are comprised of how to interact with colleagues, how to solve problems, and how to manage the tasks or works. These skills incorporate interpersonal skills, communication skills, listening skills, and empathy among others. In relation to this, Roslan, N.M., and Hamid, S.A. (2020) discovered that students' soft skill growth improved after they participated in CCAs.

CCAs' Impact on Students' Academic Performance

Fujita, K. (2006) illuminated that several researches have been performed on the difference between CCAs and school performance. The participation of CCAs normally resulted in improved average grades, aspirations for higher education, improved attendance at college, and reduced absenteeism. Singh, A. (2017) found a significant correlation between academic performance in verbal communication and social science subjects and the level of student's engagement in CCAs.

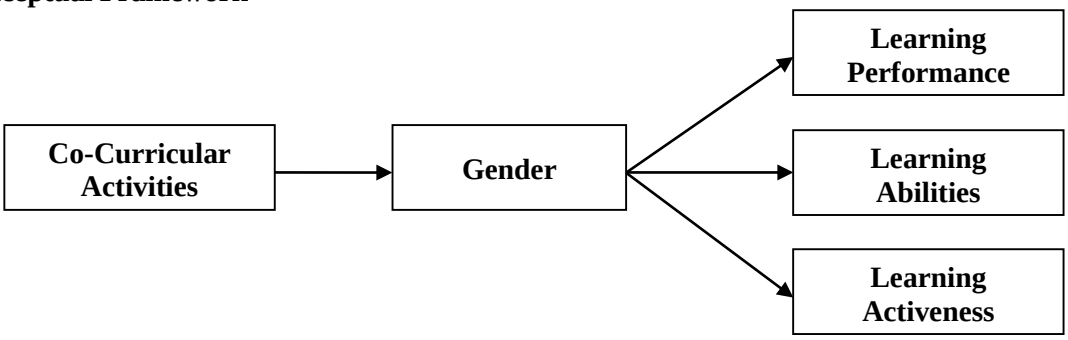
The Relationship of Co-Curricular Activities with Learning Abilities

Lafontaine, M. P.,Lippé, S. and et al (2020) explained that learning abilities are present in infancy, as they are critical for adaptation. Lipscomb, J. P. (2007) extracted that co-curricular activities can help students become more engaged in their studies. Shulruf, B., Tumen, and N., et al (2007) disclosed that co-curricular activities have a positive impact on learning abilities in several ways.

Co-Curricular Activities and Self-Efficacy of Students

The self-efficacy of students makes it achievable and favorable. Bekomson, A.N., and Amalu, M.N. et al (2020) disclosed that interest in CCAs has a particularly strong impact on social, intellectual, linguistic, and moral self-efficacy.

Conceptual Framework



METHODOLOGY

The research was a quantitative and descriptive study that involved conducting a survey to gather data from public middle schools in Malir Town Karachi. The study utilized a simple random sampling technique based on convenience, with a sample size of 120 student respondents. The study population was comprised of all students from Malir Town Karachi. A total of twenty-one public middle schools in which the total number of students were 2202 (773 Boys and 1429 Girls) in Middle Grades of Malir Town Public Schools were considered as population. The data was collected by using one closed-ended questionnaire designed for students. The Urdu translations of the statements were provided to ensure that the respondents could easily understand and provide their answers. The questionnaire consisted of two sections: Section I included the particulars of the respondents, while Section II focused on the measurement scale. Data was collected by using a five-point Likert scale, ranging from Strongly Agree (SA) to Strongly Disagree (SD). The reliability and validity of the questionnaires were duly checked and approved. The collected data was analyzed using both descriptive and inferential statistics, including the application of an independent t-test to observe the relationship among the variables. Statistical analysis was performed by SPSS version 25.

3.1. Demographic Information of Students of Public Middle Schools Malir Town, **Karachi**

Participants	No. of Participants	Percentage
Boys	36	36%
Girls	64	64%
Total	**100**	**100%**

DATA ANALYSIS

Reliability Analysis: Questionnaire of Respondent Students

Reliability analysis is used to measure the internal consistency of the questionnaire (Saunders et al., 2012). The reliability of the questionnaire was measured by using measures of Cronbach's alpha by employing Statistical Package for the Social Science (SPSS).

Table 1

The Reliability Scale of the Questionnaire

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of Items
0.817	**0.817**	**18**

Description: Table 1 indicates that eighteen items were formulated for the student's questionnaire and the reliability of the questionnaire is **0.817**, which is considered acceptable. According to Nunnally and Bernstein (1994), the value of alpha should be greater than or equal to 0.7 as the table shows 70% internal consistency for better results.

Descriptive Statistics of Respondent Students

Demographic Profile of the Respondents

The demography of students who responded to this study was examined to acquire a profound thoughtfulness about the respondent's information. Demographic information such as gender, age, and level of classes are presented in this study.

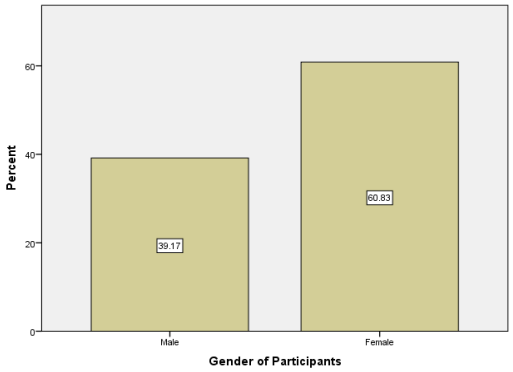
Gender Distribution of Participants

Table 2

Frequency Distribution of Gender

Gender		Frequency	Percent
Valid	Male	47	39.2%
	Female	73	60.8%
	Total	**120**	**100.0%**

Description: The gender distribution of the students is presented in table 2. It is shown that most of the respondents were Female (n= 73) which are representing 60.8% of the total respondents whereas the remaining students were male (n= 47) which are representing 39.2% of the total students. (N= 120).

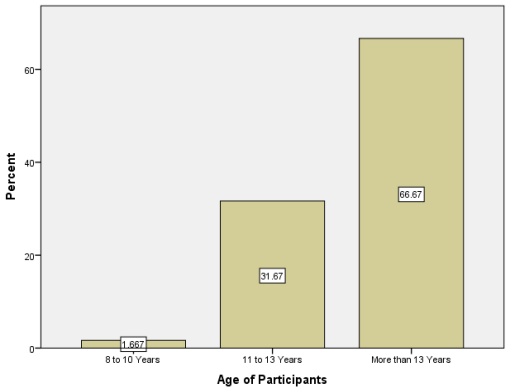


Age Distribution of Respondents

Table 3 Frequency Distribution of Age

Age		Frequency	Percent
Valid	8 to 10 Years	2	1.7%
	11 to 13 Years	38	31.7%
	More than 13 Years	80	66.7%
	Total	**120**	**100.0%**

Description: The age of participants is shown in table 3 that the students aged between 8 to 10 were 2 which shows 1.7%, the students aged 11 to 13 were 38 which represents 31.7% of the total respondents whereas most of the students aged more than 13 were 80 that constitutes 66.7% of the total students. (N= 120).

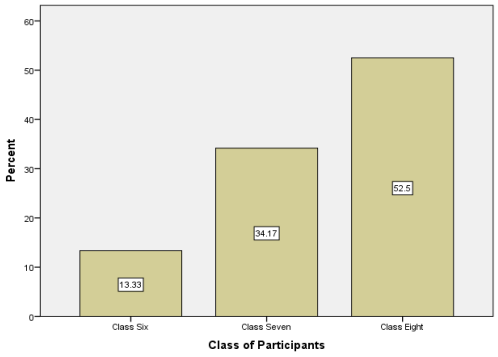


Class Distribution of Respondents

Table 4 Frequency Distribution of Classes

	Class	Frequency	Percent
Valid	Class Six	16	13.3
	Class Seven	41	34.2
	Class Eight	63	52.5
	Total	**120**	**100.0**

Description: The classes of the students are demonstrated in table 4, the least number 16 students were in class six which constitutes 13.3%, 41 students were in class seven representing 34.2% whereas 63 students were in class eight which represents 52.5% of the total students (N= 120).



Variables of the Study

The hypotheses generated for the study were:

Descriptive Statistics of each constructed items

Learning Performance

Learning performance refers to an attitude in which students can perform specific skills as a result of instruction. In such a framework, students widely demonstrate their ability to implement or use their gained

knowledge rather than simply knowing the information. Thus, this construct is designed to measure the learning performance of the respondent students.

Table 5 Descriptive Statistics of Learning Performance of the Construct

Items	N	Minimum	Maximum	Mean	Std. Deviation
LP1	120	1	5	1.97	1.23
LP2	120	1	5	2.10	1.22
LP3	120	1	5	2.11	1.11
LP4	120	1	5	2.10	1.23
LP5	120	1	5	2.36	1.29
Learning Performance	**120**	**1**	**5**	**2.03**	**0.64**

Description: The result of table 5 shows the descriptive statistics of the learning performance of the respondent students.

Learning Abilities

Learning abilities generally refer to mental ability or capacity to comprehend and understand the learning experience. Hence, this construct is formulated to determine the learning abilities of the respondent students.

Table 6 Descriptive Statistics of Learning Abilities of the Construct

Items	N	Minimum	Maximum	Mean	Std. Deviation
LA1	120	1	5	1.71	1.02
LA2	120	1	5	2.36	1.15
LA3	120	1	5	2.45	1.23
LA4	120	1	5	1.86	1.06
LA5	120	1	5	2.50	1.22
Learning Abilities	**120**	**1**	**5**	**2.14**	**0.835**

Description: The aforementioned table 6 shows the descriptive statistics of the learning abilities of the respondent students.

Learning Activeness

Learning activeness refers to an activity in which the students participate or interact with the learning process. This learning domain gives the opportunity to actively engage with the information which helps students perform better. Thus, this construct is devised to examine the learning activeness of the respondent students.

Table 7 Descriptive Statistics of Learning Activeness of the Construct

Items	N	Minimum	Maximum	Mean	Std. Deviation
LA1	120	1	5	1.78	1.06
LA2	120	1	5	2.00	1.24
LA3	120	1	5	2.10	1.17
LA4	120	1	5	2.02	1.24
Learning Activeness	**120**	**1**	**5**	**1.98**	**0.758**

Description: The aforementioned table 7 shows the descriptive statistics of the learning activeness of the respondent students.

Hypotheses Analysis of the Variables

Learning Performance

H1: There is no significant difference of co-curricular activities on students' learning performance between male and female students at the middle level of public schools in Malir Town.

Independent T-test
Table 8 Learning Performance

	t-test for Equality of Means						
	T	*Df*	*Sig.* (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Learning Performance	**5.697**	**118**	**.001**	**.69292**	**.12163**	**.45206**	**.93378**

Description:
An independent t-test was applied to test the significant difference of co-curricular activities on the learning performance between male and female students. The resulted value is (P= 0.001) which shows that the given value is less than set alpha (0.05) which indicates that the given hypothesis is rejected. The result extracted that the mean score of male students is 2.5 whereas the mean score of the female student is 1.8. So, the inferential test reveals that the male students have a significantly higher level of learning performance than female students at the middle level of public schools at Malir Town.
T= 5.697
Df= 118
Sig. (2-tailed) *P*= 0.001

Learning Abilities

H2: There is no significant difference of co-curricular activities on the learning abilities between male and female students at the middle level of public schools in Malir Town.

Independent T-test
Table 9 Learning Abilities

	t-test for Equality of Means						
	T	*Df*	*Sig.* (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Learning Abilities	**2.599**	**118**	**.011**	**.31268**	**.12031**	**.07443**	**.55093**

Description:
Examining the hypothesis that there is no significant difference of co-curricular activities on the learning abilities between male and female students, an independent t-test was employed. The resulted value (P= 0.011) shows that the given value is less than the set alpha (0.05) which indicates that the given hypothesis is rejected. Moreover, the result disclosed the mean score of male students which is 2.3 while the mean score of female students that is 2.0. Therefore, the result demonstrates that the male students have a significantly higher level of learning abilities than female students at the middle level of public schools at Malir Town.
T= 2.599
Df= 118
Sig. (2-tailed) *P*= 0.011

Learning Activeness

H3: There is no significant difference of co-curricular activities on learning activeness in the classroom performance between male and female students at middle-level public schools in Malir Town.

Independent T-test
Table10 Learning Activeness

	t-test for Equality of Means						
	T	*Df*	*Sig.* (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Learning Activeness	**5.548**	**118**	**.001**	**.70410**	**.12692**	**.45276**	**.95543**

Description:
Among the male and female students of middle-level public schools mode (N=120), there is no significant difference of co-curricular activities on the learning activeness in the classroom performance between male and female students at the middle level. Therefore, the null hypothesis with respect to the mean score of male and female students is rejected as the result reveals that t (118) = 5.548 p<0.05the significance p-value is 0.003 which concluded that the male students have a significantly higher sense of learning activeness than female students, the mean score of male students is 2.40 whereas the mean score of female student is 1.70.

T= 5.548
Df= 118
Sig. (2-tailed) *P*= 0.001

FINDINGS

This chapter aims to offer the findings and conclusion of difference s between dependent, and independent variables used in this research. This chapter also provides recommendations based on the literature and findings from the study. The usefulness of the findings is discussed regarding the impact of CCAs on students' overall progress in public middle-level schools in Malir Town.

Findings of the Constructed Items

Learning Performance

The resulting value is \(p = 0.001 \), which indicates that the given value is less than the preset alpha (0.05), leading to the rejection of the given hypothesis. The results suggest that the mean score of male students is 2.5, while the mean score of female students is 1.8. Therefore, the inferential test demonstrates that male students exhibit significantly higher learning performance than female students at the middle level of public schools in Malir Town.

Learning Abilities

After conducting an independent t-test to evaluate the hypothesis that there is no significant difference between co-curricular activities and the learning abilities of male and female students, the resulting p-value (P= 0.011) is lower than the set alpha (0.05), indicating the rejection of the given hypothesis. Additionally, the mean score of male students is 2.3, while the mean score of female students is 2.0. Therefore, the results suggest that male students have significantly higher learning abilities than female students at the middle level of public schools in Malir Town.

Learning Activeness

In a study involving 120 male and female students from middle-level public schools, it was found that there is a significant difference between co-curricular activities and the learning activeness of male and female students in the classroom performance at the middle level. The null hypothesis concerning the mean score of male and female students is rejected, as the result reveals that t (118) = 5.548, with a significance p-value of 0.003. This concludes that male students have a significantly higher sense of learning activeness than female students, with the mean score of male students being 2.40, whereas the mean score of female students is 1.70.

Findings of Hypotheses

I. The findings of the hypothesis that there is significant difference between co-curricular activities and students' learning performance of male and female students demonstrate that male students have significantly higher levels of learning performance in comparison to female students. Therefore, the included that the hypothesis is rejected.

II. The hypothesis results show that male students have higher learning abilities than female students, which does not support the idea that there is no significant difference between co-curricular activities and the learning abilities of male and female students.

III. The finding of the hypothesis discloses that male students have a higher level of learning activeness in classroom performance than female students. Resultantly, the hypothesis does not support the

impression that there is no significant difference between co-curricular activities and learning activeness in the classroom performance of male and female students.

The Conclusion of the Hypotheses

The conclusion of the hypotheses portrays that male students have a higher sense of learning performance than female students. Similarly, in learning abilities, male students also have significantly higher mean scores than female students. In comparing, mean scores between male and female students regarding learning activeness, the male students have higher mean scores than female students. So, the holistic result depicts that male students have a higher mean score in all four constructs which shows that male students have more advantages in participating in CCAs.

CONCLUSION

Based on the study findings, the researcher concluded that co-curricular activities are essential for enhancing students' skills and development. These activities provide a wide range of opportunities for students to develop their personalities. However, the researchers also found that female students were less motivated to participate in such activities, which could affect their learning performance compared to male students. Additionally, most public schools in Malir Town lack the necessary resources and equipment to conduct physical activities. The researchers suggested prioritizing these activities as a crucial part of education and assessing students not only based on their academic results but also on their involvement in such activities to ensure their overall development and performance.

DISCUSSION

The researchers have observed that no such a study has been conducted on co-curricular activities in this particular area. Therefore, this research is significant as it sheds light on the importance of co-curricular activities in education in Malir Town. It can also serve as a guide for potential researchers who wish to work in this field.

RECOMMENDATIONS

From the findings of this study, the researchers wish to make the recommendations below:

Recommendations for the School Management

1. The study shows that Co-Curricular Activities (CCAs) are active at the beginning of the academic year but decline over time. It's concerning that these activities are not fully sustained. The school should ensure the completion of these activities and make sure all students understand their long-term benefits.

2. This study identifies a communication gap between parents and teachers, emphasizing that parents may not fully understand the significance of co-curricular activities (CCAs) in students' learning and development. It suggests that schools should communicate with parents to increase their awareness and motivate students to participate in CCAs.

3. The research also indicates that there is lower participation of female students compared to male students in extracurricular activities at public middle-level schools in Malir Town. Therefore, it is imperative for the school management to proactively motivate female students and encourage their participation in these activities. A well-devised plan should be formulated to ensure that a maximum number of female students are inspired to take part in extracurricular activities.

Recommendation for Policymakers

1. Through wide-ranging research, the policymakers are required to analyze the well-rounded effectiveness of the co-curricular activities in terms of their value in developing the students in Pakistan, particularly in Malir Town. The evidence-based data will be instrumental in devising policy reforms.

2. The research findings reveal that a majority of middle-level public schools in Malir Town lack the resources and equipment necessary to conduct co-curricular activities. To facilitate a wide range of activities, it is vital to ensure the availability of the required equipment. Therefore, policymakers should prioritize providing the necessary equipment and fostering a conducive environment for showcasing these activities.

3. The research shows that most teachers are not properly trained or motivated to conduct these activities. Policymakers should expand teacher training and provide incentives to encourage these activities. Regular training for teachers is recommended to ensure effective implementation and a significant impact on student development.

4. In today's world, gender equality is essential, and discriminating based on gender is unavoidable. Research shows that female students are less likely to participate in co-curricular activities compared to male students due to outdated stereotypes. Policymakers should conduct awareness campaigns to ensure equal opportunities for female students.

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