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### Determining the Relationship between Co-Curricular Activities and Students' Leadership Skills at Secondary Level

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#### Abstract

Co-curricular activities fulfill many roles inside educational institutions. Co-curricular activities enhance students' academic knowledge and develop their abilities. These activities improve the students' capacity to operate with more efficiency and effectiveness. The co-curricular activities are also important for the leadership skills of students. The main objective of this was to determine the relationship between the co-curricular activities and students' leadership skills at secondary level. A sample size of 2014 students consisting 1049 male students and 965 female students studying at the public secondary schools of district Bahawalnagar was selected by using the stratified random sampling technique. The data was collected by using the adopted questionnaire. The collected data was analysed by using the descriptive and inferential statistical tools through SPSS-25. The findings of the study indicated a significant relationship between co-curricular activities and leadership skills at secondary education level.

**Key Words:** Co-curricular Activities, Students' Leadership Skills, Secondary Level

## Introduction

Leadership is the ability to recognize how things are changing and then take the best possible action in response to those changes. Candidates that can show they have leadership qualities are preferred by employers. Both the industry and the classroom can benefit from these abilities. People's responses to hardship are regularly examined in studies of leadership effectiveness. In order to successfully rule nations in the twenty-first century, both men and women are required. Men are incapable of coming to wise political and social judgments by themselves. Women in eastern nations are commonly repressed in comparison to how they are seen in the West nowadays (Gandolfi & Stone, 2018).

The personality and life experiences of a person influence their leadership style. It results from having a sound mentality. Any student who wants to grow their leadership abilities must get involved in society and organizations. By participating in extracurricular activities like scientific research and community service, students can develop their leadership skills. Grandzol et al. (2010) found that advanced degrees, lectures, seminars, book fairs, and training programs all help students strengthen their leadership and character.

Sporting and other extracurricular involvement is a great way for women to get ready for a successful profession. But not all Western women work in roles that call for strong leadership. Women are still not allowed to participate in sports or other extracurricular activities in Pakistan. For a nation to succeed, there must be an equal representation of men and women in positions of leadership (Ordaz et al., 2021).

The bulk of college extracurricular were made to help students get ready for leadership roles in the military, government, business, and other sectors. The majority of student affairs staff members who interact with student groups don't create calendars for important occasions. This needs to be closely watched. It has

long been understood that in order for kids to grow and develop personally, leadership skills need to be taught (Zada, 2021).

If students take up leadership roles in university extracurricular activities, they may perform better in the classroom and on the job. College athletes' developed leadership abilities from participating in sports and other leadership roles are commonly put to use in their post-college professions. Because they help students develop leadership skills, extracurricular activities like sports and clubs have a big impact on a student's chances of getting a job after graduation. Academic achievement has been connected to extracurricular activity participation and success (Bayudan et al., 2024). According to the study of Cherng et al. (2014), involvement in extracurricular activities helps students academically, socially, and as future leaders.

Spending time on sports and other activities outside of school can be bad for one's career. It's getting harder for the world's weaker countries to deal with this. Most nations, both those in rapid development and those that are already wealthy, subsidize collegiate sports. Although these activities might and need to start in elementary school, college students will gain the most because they are more mature. Aside from education, hobbies can also be used to overcome emotional and physical obstacles (Ghani et al., 2020).

The body language and facial expressions of an athlete who is experiencing extreme stress can disclose a lot about their feelings. Participants may exhibit poor body language without being aware of it. College sports are a great way to develop your ability to handle success and disappointment with grace. After a defeat, the majority of leaders are critical of their teams, which is bad for the players' growth. In the world of sports, educators and coaches keep an eye on how students behave in the classroom. Children can learn from them how to keep their body language consistent, which is an important quality to look for in sports. Both the youngster and his or her parents find it tough when their child is not chosen for a collegiate

sporting team. Additionally, you won't always win; bad days will happen. Teachers must exercise prudence in these situations. Athletes typically find that losing their composure has a negative impact on their performance (Don & Ibrahim, 2019).

### **Objectives of the Study**

The objectives of the study were;

1. To evaluate the role of co-curricular activities and students' leadership skills at secondary level.
2. To find out the importance of co-curricular activities and students leadership skills at secondary level.
3. To find out the relationship between co-curricular activities and students leadership skills at secondary level.

### **Research Questions**

The research questions of the study were to be;

1. Is there any relationship between co-curricular activities and students' leadership skills at secondary level?
2. To what extent does students' participation in co-curricular activities and contribute to their leadership skills development at secondary level?
3. What is the role of co-curricular activities and students' leadership skills at secondary level?

### **Review of the Literature**

#### **Defining Co-Curricular Activities**

Co-curricular activities are defined as structured and purposeful activities that occur alongside the formal academic curriculum. While the academic curriculum imparts subject-specific knowledge and cognitive skills, co-curricular activities offer a complementary avenue for holistic development by fostering social, emotional, physical, and intellectual growth. These activities encompass a broad spectrum of engagements, including student clubs, sports teams, community

service initiatives, cultural and arts programs, leadership workshops, conferences, and more (Mancha & Ahmad, 2016).

### **The Essence of Leadership Skills**

Leadership, as a concept, transcends titles and hierarchical positions. It encompasses the ability to inspire, influence, and guide others toward shared goals and aspirations. Leadership skills are not innate traits; rather, they are cultivated through experiences, mentorship, self-reflection, and intentional development efforts. Effective leaders exhibit empathy, self-awareness, resilience, and the capacity to foster collaboration and innovation (Fox & Sease, 2019).

Leadership skills are not confined to formal leadership roles; they are relevant across all aspects of life. Whether in academic settings, professional environments, community engagements, or personal relationships, leadership skills enable individuals to navigate challenges, drive change, and contribute positively to society. The development of leadership skills is not only pertinent to individuals aspiring to lead; it is essential for all individuals aiming to thrive in a dynamic and interconnected world (Kumara, 2023).

### **The Nexus of Co-Curricular Activities and Leadership Skills**

The intersection of co-curricular activities and leadership skills is a dynamic realm of exploration, research, and practical application. Co-curricular activities provide a fertile ground for students to develop, refine, and internalize leadership skills in experiential and authentic settings. Engaging in co-curricular activities offers students opportunities to collaborate, innovate, communicate, and assume responsibilities, thus facilitating the cultivation of leadership attributes (Soria et al., 2019).

The connection between co-curricular activities and leadership development is not coincidental but rather grounded in intentional design. Co-curricular activities are structured to facilitate skill acquisition, personal growth, and the application of knowledge beyond the classroom. Leadership skills

naturally emerge and evolve within these activities as students engage in planning events, managing teams, resolving conflicts, and making ethical decisions (Guo & Liem, 2023).

### **Types of Co-Curricular Activities**

Co-curricular activities encompass a wide spectrum of experiences that cater to students' diverse interests, aspirations, and developmental needs. These activities can be broadly categorized into various types, each contributing uniquely to students' growth and skill development (Hannam et al., 2019).

### **Student Organizations and Clubs**

Student organizations and clubs are perhaps the most recognizable forms of co-curricular activities. These groups provide students with platforms to connect with peers who share similar interests, passions, and goals. From academic clubs focused on specific disciplines to cultural organizations celebrating diversity, student organizations foster a sense of belonging, leadership opportunities, and a space for students to collaborate and plan events. Research by Johnson and Voelkel (2021) explored the impact of student organizations on leadership skill development. The study revealed that students engaged in clubs reported improved communication, teamwork, and organizational skills, underscoring the significance of such activities in fostering leadership attributes.

### **Community Service and Volunteerism**

Engagement in community service and volunteer activities contributes to students' sense of social responsibility and empathy. These activities offer opportunities to connect with the local community, address societal challenges, and make a positive impact. Through community service, students develop leadership skills such as organizing events, problem-solving, and working collaboratively to create meaningful change. A study by Silva-Martinez (2023) investigated the role of community service in leadership development among college students. The

research highlighted the connection between community engagement and the cultivation of empathy, adaptability, and ethical decision-making skills.

### **Leadership Development Programs**

Specifically designed leadership development programs offer students structured opportunities to acquire and enhance leadership skills. These programs often include workshops, seminars, retreats, and mentoring initiatives. Leadership development programs focus on attributes such as communication, conflict resolution, decision-making, and self-awareness, providing students with a comprehensive toolkit for effective leadership. Tan and Adams (2023) conducted a study examining the impact of leadership development programs on students' leadership skill acquisition. The findings emphasized the importance of experiential learning and hands-on activities in enhancing leadership attributes.

### **Sports and Athletics**

Participation in sports and athletic activities contributes to students' physical well-being, teamwork, discipline, and resilience. Sports teams provide opportunities for students to collaborate, strategize, and compete, fostering attributes such as effective communication under pressure, adaptability, and perseverance. A research study by Davis (2019) explored the correlation between participation in athletics and leadership skills. The study highlighted how sports activities enable students to develop leadership qualities such as motivation, accountability, and the ability to work in a team toward shared goals.

### **Arts and Cultural Activities**

Engagement in arts and cultural activities nurtures creativity, self-expression, and an appreciation for diverse forms of artistic expression. Students involved in theater, music, dance, and visual arts gain skills in communication, creativity, problem-solving, and public presentation. These activities encourage students to step outside their comfort zones, assume responsibilities, and exhibit leadership through artistic collaboration. Martinez and Welton (2017) conducted a study

examining the impact of arts and cultural activities on leadership skill development. The findings highlighted how creative endeavors foster adaptability, resilience, and the capacity to inspire others.

### **Professional and Academic Clubs**

Professional and academic clubs provide students with avenues to explore careers, gain industry insights, and engage in discussions relevant to their academic disciplines. These clubs offer networking opportunities, workshops, and events that foster leadership skills such as networking, public speaking, and professional etiquette. A study by Thompson (2019) investigated the influence of academic clubs on leadership skill development. The research underscored how participation in these clubs enhances students' ability to articulate complex ideas, collaborate with peers, and engage in intellectual discourse.

### **Professional Development and Workshops**

Workshops and seminars focused on professional development offer students' insights into career pathways, job skills, and industry trends. These sessions often cover topics such as resume building, interview techniques, and workplace etiquette, equipping students with practical skills for their future endeavors. Research by Davis (2019) explored the influence of professional development workshops on leadership skill acquisition. The study highlighted how these sessions enhance students' professionalism, networking abilities, and readiness for the world beyond academia.

Co-curricular activities encompass a diverse array of experiences that contribute significantly to students' holistic development. From student organizations and clubs to community service, leadership development programs, sports and athletics, arts and cultural activities, professional and academic clubs, student government, and professional development workshops, these activities offer students opportunities to explore their interests, engage with peers, and cultivate vital leadership skills. The subsequent chapters will delve into the



interplay between these diverse co-curricular activities and the development of leadership skills in students.

### **Empirical Studies: Unveiling the Correlation between Co-Curricular Activities and Leadership Skills**

The nexus between co-curricular activities and the development of leadership skills has been a subject of significant empirical investigation. Scholars and researchers have conducted numerous studies to examine the extent to which engagement in co-curricular activities contributes to the cultivation of essential leadership attributes. In this section, we delve into a selection of empirical studies that unveil the correlation between co-curricular activities and leadership skills, shedding light on the transformative impact of these activities on students' personal and professional growth.

#### **The Role of Student Organizations in Leadership Skill Development**

In their study, Brown et al. (2019) explored the impact of student organizations on leadership skill acquisition among college students. The researchers conducted surveys and interviews to assess the leadership experiences of students involved in various clubs and organizations on campus. The findings indicated a positive correlation between club participation and the development of leadership attributes. Participants reported improvements in communication, teamwork, and organizational skills as a result of their involvement in student organizations. The study's findings underscore the significance of co-curricular activities, particularly student organizations, in nurturing leadership skills. The collaborative nature of these activities provides students with opportunities to engage in group dynamics, decision-making processes, and event planning, fostering qualities essential for effective leadership.

#### **Community Service and Leadership Skill Development**

Onuoha et al. (2021) conducted a study to investigate the relationship between community service engagement and leadership development among college

students. Through surveys and qualitative interviews, the researchers explored how participation in community service activities influences students' leadership skills. The study revealed that community service fosters the development of empathy, adaptability, and ethical decision-making, all of which are integral to effective leadership. The findings emphasize the transformative impact of co-curricular activities that focus on serving others and addressing societal challenges. By engaging in community service, students not only contribute positively to their communities but also cultivate leadership attributes that extend beyond traditional classroom learning.

### **Leadership Development Programs and Skill Acquisition**

Herman (2021) conducted a study to examine the impact of leadership development programs on college students' leadership skill acquisition. The researchers employed mixed-methods research, combining surveys and focus group interviews, to assess the effectiveness of leadership development initiatives. The study revealed that students who participated in structured leadership programs demonstrated enhanced attributes such as communication, problem-solving, and conflict resolution skills. The study highlights the intentional design of co-curricular activities, such as leadership development programs, to provide students with tailored experiences that foster specific leadership skills. These programs offer students a structured environment to engage in experiential learning and apply leadership concepts to real-world scenarios.

### **Athletics and Leadership Skill Acquisition**

Davis et al. (2019) conducted a study to explore the correlation between participation in athletics and the development of leadership skills among college athletes. The researchers employed surveys and interviews to assess the leadership experiences of student-athletes. The findings indicated that participation in sports activities contributes to the development of leadership qualities such as motivation, accountability, and teamwork. The study underscores the importance of sports and

athletic activities as co-curricular avenues for cultivating leadership skills. Through team dynamics, competition, and sportsmanship, student-athletes acquire attributes that are transferable to various leadership contexts.

### **Arts and Cultural Activities and Leadership Attributes**

Xaba (2021) conducted a study to examine the impact of arts and cultural activities on leadership skill development among college students. Through surveys and focus group discussions, the researchers explored how engagement in artistic pursuits fosters leadership attributes. The study revealed that creative endeavors promote adaptability, resilience, and the ability to inspire others. The findings emphasize the multidimensional nature of leadership development within co-curricular activities. Arts and cultural activities provide students with opportunities to explore their creativity, collaborate with peers, and assume leadership roles within expressive contexts.

### **Student Government Participation and Leadership Growth**

Wase and Lull (2021) conducted a study to investigate the impact of student government participation on leadership skill development. The researchers utilized qualitative interviews and document analysis to understand how involvement in student governance roles contributes to leadership growth. The study revealed that governance roles enhance students' understanding of organizational dynamics, negotiation skills, and the ability to balance diverse viewpoints. The study underscores the unique learning opportunities that co-curricular activities like student government provide. These roles require students to navigate complex decision-making processes, advocate for their peers, and engage in practical leadership within institutional contexts.

### **Student Government and Leadership Roles: Developing Ethical and Strategic Leadership**

Engaging in student government roles and formal leadership positions within the institution provides students with opportunities to develop ethical and strategic

leadership skills. Student government leaders make decisions that impact the student body, requiring them to consider the collective welfare, uphold ethical standards, and communicate transparently. These roles also demand strategic thinking, as leaders need to prioritize initiatives, allocate resources, and manage complex organizational structures (Thelma et al., 2024).

Specific co-curricular activities offer distinct avenues for the development of leadership skills among students. Clubs and organizations foster collaborative leadership, sports and athletics nurture transformational leadership, performing arts and creative endeavors encourage ethical leadership, community service and social responsibility cultivate servant leadership, workshops and competitions enhance adaptive leadership, and student government and formal leadership roles develop ethical and strategic leadership. The subsequent chapters will delve into the factors influencing leadership development in co-curricular activities and the empirical evidence supporting the relationship between these activities and leadership skills (Pahl et al., 2022).

### **Factors Influencing Leadership Development in Co-Curricular Activities**

While engagement in co-curricular activities undoubtedly contributes to leadership development, the extent to which these activities foster leadership skills can be influenced by a multitude of factors. This section delves into the nuanced interplay of various factors that shape the effectiveness of co-curricular activities in nurturing leadership skills among students.

#### **Mentorship and Guidance**

Mentorship plays a pivotal role in shaping leadership development within co-curricular activities. Effective mentors provide students with guidance, feedback, and a supportive environment to experiment with leadership roles. Mentorship enhances the quality of learning experiences by offering valuable insights, sharing personal experiences, and modeling leadership behaviors.

Assefa (2024) examined the impact of mentorship on leadership development within a student entrepreneurship club. The research found that students who had access to mentors exhibited greater self-confidence, improved problem-solving abilities, and a deeper understanding of ethical leadership. This underscores the significance of mentorship in shaping leadership qualities within co-curricular contexts.

### **Organizational Structure and Support**

The organizational structure of co-curricular activities can influence the opportunities for leadership development. Well-structured activities with clear roles and responsibilities enable students to take on leadership positions and responsibilities that align with their skills and interests. Additionally, supportive faculty and advisors play a crucial role in creating a conducive environment for leadership growth.

A study conducted by Vos et al. (2018) explored the relationship between organizational structure and leadership development within a student-run environmental advocacy group. The study revealed that a clear division of roles and responsibilities allowed students to take ownership of initiatives, collaborate effectively, and develop leadership skills through practical experiences. The presence of a supportive advisor further enhanced the learning environment.

### **Inclusivity and Diversity**

Inclusivity and diversity within co-curricular activities contribute to leadership development by exposing students to varied perspectives and challenges. Engaging with individuals from different backgrounds fosters empathy, adaptability, and the ability to communicate effectively across differences. Leadership roles within inclusive environments demand sensitivity to diversity and the capacity to build cohesive teams.

Research by Siddiky (2019) investigated the impact of inclusivity on leadership development within a multicultural student organization. The findings indicated

that students who engaged in activities that promoted inclusivity demonstrated enhanced cultural competence, stronger teamwork skills, and a deeper understanding of ethical leadership. The study highlighted how diverse participation enhances leadership growth.

### **Opportunities for Reflection and Self-Assessment**

The availability of opportunities for reflection and self-assessment significantly influences leadership development within co-curricular activities. Reflective practices allow students to analyze their experiences, identify areas for improvement, and develop a deeper understanding of their leadership journey. Self-assessment tools provide a structured approach for students to evaluate their strengths and areas of growth.

A study by Sarwar et al. (2024) examined the impact of reflection on leadership development within a student volunteer organization. The research found that students who engaged in regular reflective practices exhibited improved self-awareness, enhanced emotional intelligence, and a greater ability to adapt their leadership styles to different contexts. The study highlighted how intentional reflection fosters holistic leadership growth.

### **Peer Influence and Collaboration**

Peers and collaborative interactions play a vital role in shaping leadership development within co-curricular activities. Collaborating with peers allows students to learn from each other, share experiences, and practice leadership skills in a supportive environment. Peer feedback and shared responsibilities encourage individuals to experiment with leadership behaviors and learn from each other's successes and challenges.

A study conducted by Zeeman et al. (2019) focused on the role of peer influence in leadership development within a student-run media organization. The study found that students who actively engaged in collaborative projects with their peers demonstrated enhanced communication skills, better conflict

resolution abilities, and a heightened sense of responsibility. The research highlighted the reciprocal nature of peer influence in fostering leadership growth.

### **Learning from Failure and Challenges**

The ability to learn from failure and navigate challenges is a critical factor in leadership development within co-curricular activities. Activities that expose students to setbacks and complex situations provide opportunities for them to develop resilience, problem-solving skills, and the capacity to lead under pressure. Experiencing failures also cultivates humility and a willingness to learn from mistakes.

A study by Davis et al. (2019) investigated the role of overcoming challenges in leadership development within a student engineering competition team. The research revealed that students who faced and overcame technical and logistical challenges demonstrated increased adaptability, effective crisis management skills, and a strong commitment to continuous improvement. The study emphasized the value of challenging experiences in shaping leadership growth.

Leadership development within co-curricular activities is influenced by an array of factors that shape the quality and effectiveness of the learning experiences. Mentorship, organizational structure, inclusivity, opportunities for reflection, peer influence, and the ability to learn from challenges collectively contribute to the development of leadership skills among students. Recognizing and optimizing these factors can enhance the transformative impact of co-curricular activities on leadership growth.

### **Research Methodology**

#### **Research Design**

The correlation research design was used in this study. This design is used by researchers to establish a connection between two or more variables and/or to investigate if they influence one another (Creswell & Clark, 2017). The statistical

method of correlation is used in correlation research to describe and measure the degree of link between two or more variables (Anderson & Keith, 1997). It is used to define and assess the relationship between Co-Curricular Activities and Students' Leadership Skills at Secondary Level. Although self-esteem is developed during childhood, you can learn to counteract self-defeating actions as an adult.

### Population

The Population of this study was consisted of all the male and female students 'public secondary schools of District Bhawalnagar. Details of total male and female students of public and private secondary schools is shown in Table 1.

**Table 1: Population of the Study**

Tehsil Name	M/SS	FM/SS	9 <sup>TH</sup> M	9 <sup>TH</sup> FM	10 <sup>TH</sup> M	10 <sup>TH</sup> F/M	Total
Fortabbass	21	19	1824	1219	1101	866	5010
Haroonabd	27	30	2440	2668	1286	2414	8808
Chishtian	31	39	2680	2871	1784	2478	9813
Bhawalnagar	32	22	3732	2556	3045	1990	11323
Minchinabad	16	11	1747	1210	1004	931	4892
Total	127	121	12423	10524	8220	8679	39846

### Procedure of Sample Selection

By using simple stratified sampling technique students from total 2880 were selected randomly keeping in view the proportion of male, female, urban and rural secondary schools. The detail of sample is given below in the Table 2.

**Table 2: Sample of the Study**

Sr. No	Tehsil Name	Total sample	Total sample	Total sample	Total sample	Total Sample
		9 <sup>TH</sup> M	9 <sup>TH</sup> FM	10 <sup>TH</sup> M	10 <sup>TH</sup> FM	
1	Fortabbass	109	105	116	59	389
2	Haroonabd	110	110	111	78	409
3	Chishtian	101	99	119	78	397



4	Bhawalnagar	114	102	105	83	404
5	Minchinabad	114	120	109	72	415
	Total	548	536	560	370	2014

### Development of the Research Tool

The adopted questionnaire was used in the current study. The researcher adapted questionnaire of Co-Curricular Activities and Students' Leadership Skills at Secondary Level" by Yousaf Zada and Alam Zeb (2021). The questionnaire began with a brief explanation of the study's goal and a definition of Co-Curricular Activities and Students' Leadership Skills. Instead than focusing on a single platform, students in the present research were asked to provide information on personal experiences with various forms of leadership skill and co-curricular activities.

The survey form was divided into two parts and each part dived in to 2 sections. Section 1 requested demographic information like as age (ordinal), gender, category), and self-esteem and confidence (i.e. participants were demanded to tick at least one type from Sections B contained remarks about students' perception regarding co-curricular and 25 statements were contained this section. The section C was about the perception about students' leadership skills and 11 statements in this section. These comments were graded on a five-point Likert scale, (1 = strongly disagree and 5 = strongly agree). There were a total of 36 statements and was based co-curricular activities and leadership skills among students.

### Validation of the Research Tool

**Expert Opinion.** Three senior instructors assisted in determining the scale's and subscales' content and face validity. All three qualified teachers reviewed the questionnaire items separately and made recommendations. All experts provided positive feedback on the questionnaire's structure, wording, and formulation.

**Pilot Testing.** To make additional refinements, the questionnaire was pilot tested with 150 randomly selected students from Multan. Participants representing both male and female students and teachers were specifically asked to highlight any difficulties with the language and understanding of the questionnaire items. In general, participating students reported that the language of all the items was basic and easy to grasp.

### **Reliability of the Tool**

Cronbach's alpha was applied to assess the questionnaire's reliability. The findings show that the instrument has a reliability of 0.96. This indicates that the questionnaire's reliability was acceptable. In general, a minimum percentage of reliability of 0.70 is required for research instruments.

### **Administration of the Research Tool**

The researchers obtained approval from the respective Principals before conducting the questionnaire to students. The researcher distributed the questionnaire to all 2880 sample students at their various schools during working hours, either personally or with the assistance of friends. The entire data collecting procedure took about a month to complete.

### **Analysis of Data**

#### **Scoring/Coding Procedure**

The information was coded and organized into themes that were pertinent to the questions and goals of the study. A 5-point Likert scale was used to evaluate the assertions, with 1 indicating strong disagreement, 2 indicating disagreement, 3 indicating no opinion, 4 indicating agreement, and 5 indicating strong agreement.

#### **Procedure for Statistical Analysis**

After the data collection the procedure of statistical analysis was carried out. Analysis was done via using both the descriptive and inferential statistic. Descriptive technique (i.e., mean, standard deviation and percentage) was adopted to calculate students' research efficacy in their learning process. Inferential

statistic (i.e.; t-test, independent samples and ANOVA) were performed to calculate difference in students' perception Co-Curricular Activities and Students' Leadership Skills at Secondary Level.

First, descriptive statistical tests were performed to examine the views of Co-Curricular Activities and Students' Leadership Skills at Secondary Level. Second, Independent-samples t-test was applied to analyze gender variations in students' and students' attitude toward self-esteem and academic engagement. Third, One-way between-groups ANOVA were applied to examine schools' sectors, and age-based differences between respondents' opinions regarding Co-Curricular Activities and Students' Leadership Skills at Secondary Level.

## Results

### Analysis of Secondary School Students' as a Participants and their Demographic Information

**Table 3: Frequency distribution of demographic information of participants**

Factors	Groups	Frequency	Percent
Tehsil	Bahawalnagar	359	17.8
	Chistian	363	18.0
	Fortabbas	524	26.0
	Haroonabad	378	18.8
	Minchiabad	390	19.4
	Total	2014	100.0
	Urban	1198	59.5
Location	Rural	816	40.5
	Total	2014	100.0
	Male	1049	52.1
Gender	Female	965	47.9
	Total	2014	100.0
	14 Years	255	12.7

	15 Years	356	17.7
Age Group	16 Years	620	30.8
	17 Years	783	38.9
	Total	2014	100.0
Class	9th Class	1217	60.4
	10th Class	797	39.6
	Total	2014	100.0

### Descriptive Analysis of Perception of Students' about co-curricular Activities

**Table 4: Descriptive analysis of Perception of Students' about Co-Curricular Activities**

Statement	SA	N	SDA	Mean	SD
Co-curricular activities are the integral part of the curriculum.	1893	80	41	4.4	0.7
It is indispensable for the physical and mental development of the students.	1897	80	37	4.3	0.7
It promotes the coordination and cooperation among students, teachers and administration.	1884	109	21	4.3	0.6
It helpful in developing future leadership in all discipline.	1913	88	13	4.4	0.6
It helpful in developing future leadership in all discipline.	1807	147	60	4.2	0.7
It is the best way to build democratic attitude among students.	1970	37	7	4.5	0.6
Culture customs and values enhance through such activities.	1871	98	45	4.3	0.7
The process of socialization boost through such activities.	1812	141	61	4.2	0.7

Active participation of the students make them good planner and organizer.	1930	76	8	4.4	0.6
Co-curricular activities enhance listening and communication skills of the students.	1938	50	26	4.3	0.7
Creativity and innovation develop through such activities.	1817	142	55	4.5	0.6
Co-curricular activities build self-respect and confidence in students.	1921	61	32	4.4	0.7
Emotional development and maturity enhance through such activities.	1888	105	21	4.3	0.6
Students learn rules regulations and laws that make them good citizen.	1934	76	4	4.4	0.6
It promotes tolerance, sympathy and honesty.	1815	145	54	4.3	0.7
Through these activities students able to manage conflicts	1969	36	9	4.6	0.6
Through these activities students able to handle the worst situations.	1923	58	33	4.3	0.6
Students learn to manage time, energy and situations.	1955	56	3	4.3	0.6
Students learn the hard work, strength and control through such activities.	1823	139	52	4.4	0.5
Success and failure in activities necessary for the training of future life of the students.	1879	113	22	4.2	0.7
Leading and working with the group enhance students leadership influences.	1968	40	6	4.5	0.6
It provides base for the development of balance personality.	1888	92	34	4.3	0.7
Students learn nationalism and patriotism.	1861	129	24	4.3	0.7

Co-curricular activities reduce extremism and terrorism.	1945	58	11	4.4	0.6
It makes students as global citizen.	1809	153	52	4.3	0.7
Overall				4.4	0.6

Table 4 shows the descriptive analysis of the perception of students about co-curricular activities at secondary education level. The table shows that the mean value for most of the statements was more than 4, so most of the students have positive perceptions about the co-curricular activities at secondary education level.

#### Inferential Analysis of ANOVA Test about Perception of Students' about Co-Curricular Activities

**Table 5: Independent t-test for Perception of Students' about Co-Curricular Activities on location based**

Factor	Location	N	Mean	SD	t	df	Sig.
Perception of Students' about Co-curricular Activities	Urban	1198	108.59	7.030	-.517	2012	0.08
	Rural	816	108.75	6.487	-.525	1839.14	

Table 5 shows the results of independent samples t-test for the perception of urban and rural students about co-curricular activities. Table shows that there was a significant difference was found in the perceptions between the urban and rural students about co-curricular activities at secondary level.

**Table 6: Independent t-test for Perception of Students' about Co-Curricular Activities on Gender**

Factor	Gender	N	Mean	SD	t	df	Sig.
Perception of Students' about Co-curricular Activities	Male	1049	108.79	6.933	.95	2012	0.06
	Female	965	108.50	6.682	.95	2007.63	

Table 6 shows the results of independent sample t-test between male and female about the perception of co-curricular activities. The results showed that there was a significant difference between the male and female about the perception of co-curricular activities at secondary level.

**Table 7: Independent t-test for Perception of Students' about Co-Curricular Activities Based on Tehsils**

Factors	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	314.246	4	78.562	1.694	0.15
Within Groups	93143.969	2009	46.363		
Total	93458.215	2013			

Table 7 shows the results of independent sample t-test for perception of students about co-curricular activities based on tehsils. Tables showed that no significant difference was found between the perception of students about co-curricular activities based on tehsils.

**Table 8: Independent t-test for Perception of Students' about Co-Curricular Activities Based on Class Level**

Factor	N	Mean	SD	t	df	Sig.
Perception of 9th	1217	108.62	6.549	-.26	2012	
Students' about Co- Class						.000
curricular Activities 10th	797	108.70	7.203	-.26	1586.85	
Class						

Table 8 shows the results of independent samples t-test for the perception of students about curricular activities based on class level. Table shows that significant difference was found between the students of difference classes for the perception about co-curricular activities at secondary level.

**Descriptive Analysis of Perception about Students' Leadership Skills**

**Table 9: Descriptive Analysis of Perception about Students' Leadership Skills**

Statement	SA	N	SDA	Mean	SD
Co-curricular activities help achieve aims in life	1913	86	15	4.42	.635
It develops decision-making power	1894	86	34	4.36	.676
It develops my self-confidence	1856	127	31	4.25	.654
It enhances communication skill.	1942	64	8	4.35	.568
It helps in making social interactions.	1802	157	55	4.24	.725
Develops ability to meet challenges effectively.	1930	66	18	4.48	.639
It develops team spirit.	1845	101	68	4.33	.781
It develops spirit of sacrifice.	1945	68	1	4.36	.548
Helps in understanding others' viewpoints.	1890	110	14	4.36	.636
Helps in becoming a team member.	1819	139	56	4.31	.738
It helps in establishing social relationships.	1890	104	20	4.34	.645
Overall				4.35	0.66

Table 9 shows the descriptive analysis of perception of students about leadership skills. Table shows that most of the statements have mean scores of more than 4 which means that most of the students have positive perceptions about the leadership skills due to co-curricular activities.

**Table 10: Independent t-test for Perception about Students' Leadership Skills based on Gender**

Factor	Gender	N	Mean	SD	T	df	Sig.
Perception about Students' Leadership Skills	Male	1049	47.8	3.00	.11	2012	0.25
	Female	965	47.8	2.95	.11	2002.7	

Table 10 shows the results of an independent sample t-test for the perception of students about leadership skills based on gender due to co-curricular activities. Table shows that no significant difference was found between the male and female



students regarding the perception of perception of leadership skills due to co-curricular activities at secondary level.

**Table 11: Perception about Students' Leadership Skills based on Age Level**

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	31.220	3	10.407	1.177	.317
Within Groups	17767.440	2010	8.840		
Total	17798.660	2013			

Table 11 shows the results of ANOVA for the perception of students' leadership skills based on age level. Table shows that no significant difference was found between the students about the perception based on age level.

**Pearson Correlational Analysis between Perception of Students' about Co-Curricular Activities and Perception about Students' Leadership Skills**

**Table 12: Pearson Correlational Analysis between Perception of Students' about Co-Curricular Activities and Perception about Students' Leadership Skills**

Perception of Students' about Co-curricular Activities	Pearson Correlation		.830**
	Sig. (2-tailed)	1	.000
Perception about Students' Leadership Skills	Pearson Correlation	.830**	1
	Sig. (2-tailed)	.000	

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 12 shows the results of Pearson correlational analysis between perception of students' about co-curricular activities and perception about students' leadership skills at secondary level. Table shows that there was a strong positive correlation found in perception of students' about co-curricular activities and perception about students' leadership skills at secondary level.

**Discussion**

Engaging in co-curricular activities provides students with the chance to acquire soft skills, like leadership, communication, teamwork, problem-solving, and other

industry relevant talents. A study conducted by Kausar et al. (2024) discovered that students at secondary institutions utilize co-curricular activities as a means to improve their self-confidence, foster teamwork, develop communication skills, and establish stronger intercommunication. Engaging in co-curricular activities enables pupils to enhance their self-confidence and cultivate robust character qualities and leadership abilities. These abilities are highly pertinent to students in the future, particularly when they commence their job search after completing their studies (Bokhari et al., 2015).

A study conducted by Ghani et al. (2020) has established a noteworthy correlation between active involvement and the development of leadership skills. Based on the study's findings, a compelling module package has been suggested to promote students' participation in co-curricular programs as a means of developing their leadership skills. A study conducted by Rafiullah et al. (2017) revealed that 88% of students concur that extracurricular activities augment the leadership attributes of students. Engaging in co-curricular activities enhances students' leadership abilities, fosters their ethical decision making skills, and enables them to effectively communicate the advantages derived from their participation.

Children who engage in co-curricular activities have enhanced character development in areas such as time management and leadership skills. Additionally, they experience positive social development through activities that foster teamwork and communication skills. In addition, engagement in co-curricular activities enhances students' self-assurance, adaptability, and capacity to embrace constructive feedback, thereby fostering character development (Islam et al., 2024). The objective of this study was to determine the role of co-curricular activities in developing leadership skills among students at secondary education level. The results of the study indicated that co-curricular activities in students at secondary level create the leadership skills in students. The co-curricular activities enhance the teamwork skills to perform well in their practical life.

## Conclusion

The current study aimed to find the relationship between the co-curricular activities and the leadership skills in students at secondary education level. The study concluded that co-curricular activities enhance the leadership skills among the students at secondary education level. The co-curriculum activities create some real time team work skills in the students that could help in their practical life. On the basis of the findings of the study, it was recommended that the schools should arrange the co-curricular activities to create the leadership skills among students.

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