

The Impact of Co-Curricular and Extra Curricular Activities on Holistic Development of Elementary Pupils: Basis for Crafting an Enhancement Program

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Abstract

Co-curricular and extracurricular activities play a pivotal role in promoting holistic development among elementary pupils. These activities, ranging from sports to arts and social clubs, are known to enhance cognitive, socio-emotional, and physical development. Despite their acknowledged benefits, limited empirical studies have been conducted in the Philippine context, particularly at the elementary level and in culturally unique settings such as Bataraza District I, Palawan. This descriptive-comparative study investigated the impact of co-curricular and extracurricular activities on the holistic development of elementary pupils across small, medium, and large schools in Bataraza District I. A structured questionnaire was administered to a representative sample of pupils, and data were analyzed using statistical tools to identify significant differences in cognitive, socio-emotional, and physical outcomes. Findings revealed that participation in both co-curricular and extracurricular activities positively influenced the pupils' cognitive performance, enhanced their socio-emotional skills such as teamwork and confidence, and improved their physical health and stamina. Furthermore, significant differences were observed based on school classification, with larger schools offering more diverse activity options leading to stronger developmental outcomes. The study underscores the vital contribution of non-academic engagements to the overall development of elementary learners. It highlights the need for equitable access to diverse activities regardless of school size. A targeted program is proposed to strengthen positive outcomes while addressing challenges, ensuring all pupils in Bataraza District I benefit from holistic learning experiences.

1. Introduction

Background of Study

As part of the curriculum, various extracurricular activities were given to the pupils to strengthen their social and interpersonal skills. Anjum (2021) defined extracurricular activities as activities which are not the components of the academic curriculum but an important part of the educational environment. Extracurricular activities comprise sports, singing, music, debate, dance, drama, social services, etc. Schools can play a significant role by transmitting the energy of both normal as well as physically-

challenged students into a positive direction of personality development through extracurricular activities. Extracurricular activities play an important role to develop the skills of the students. They make students think critically, manage their time well, and become intellectually competent. They also help students to achieve social goals and maturity.

According to Wilson (2009), students who participate in extracurricular activities generally benefit from the many opportunities afforded them. Benefits of participating in extracurricular activities include having better grades, higher standardized test scores and educational attainment, a more positive self-concept and better school attendance. Participants in out-of-school activities often learned skills such as teamwork and leadership while decreasing the likelihood of alcohol use, illicit drug use and other related problem behaviors. Those who participate in out-of-school activities often have higher grade point averages, decreased absenteeism, and increased connectedness to the school. Moreover, numerous studies have underscored the positive impact of co-curricular and extracurricular activities on student development, highlighting their role in fostering social, emotional, physical, and cognitive skills (Hansen & Larson, 2017). These activities provide students with opportunities to explore their interests, develop talents, build relationships, and cultivate essential life skills, all of which contribute to their overall growth and well-being.

In the Philippine educational landscape, elementary education serves as the foundation for lifelong learning and holistic development. Beyond the confines of traditional classroom instruction, co-curricular and extracurricular activities play an important role in shaping the educational experience of elementary pupils. These activities encompass a wide range of non-academic pursuits, including sports, clubs, arts, community service, and cultural enrichment programs, which are designed to complement and enrich the academic curriculum. In the Philippine context, where education is valued as a means of social mobility and national development, co-curricular and extracurricular activities are integral components of the holistic approach to education espoused by the Department of Education (DepEd). Through programs such as the Special Program in the Arts (SPA), Youth Formation, and Sports Development, DepEd aims to provide students with a well-rounded education that nurtures their intellectual, creative, and physical potential.

Amidst growing emphasis on academic achievement and standardized testing, the significance of co-curricular and extracurricular activities in enhancing the academic performance of elementary pupils has garnered increasing attention. While academic success remains a primary objective of education, research suggests that participation in these activities offers multifaceted benefits that extend beyond mere grades and test scores.

However, along with the positive effects come negative effects. Tanner (2017) posited that extracurricular activities may have a negative effect when they produce an overloaded personal schedule and cause students to define themselves primarily by their activities rather than as students.

Despite the growing body of research examining the effects of co-curricular and extra-curricular activities on academic performance, there exists a notable research gap in understanding the differential impact of various types of activities on specific academic outcomes. While existing studies often provide a broad overview of the relationship between participation in these activities and academic success, there is limited exploration into how distinct activities, such as sports, arts, clubs, or community service, might

influence specific cognitive skills or academic subjects differently. Addressing this gap could offer valuable insights into tailoring educational interventions, as it would provide a nuanced understanding of which types of co-curricular and extra-curricular engagements are most beneficial for specific academic domains. Further, empirical research specifically examining their impact on the academic performance of elementary pupils in the Philippine educational setting remains limited. Existing studies have primarily focused on secondary and tertiary education levels or have been conducted in other cultural contexts, leaving a gap in our understanding of how these activities influence academic outcomes among younger students in the Philippines.

This highlights the need for more targeted investigations that consider the diversity of activities and their differential impact on academic performance, allowing for more precise recommendations for educators and policymakers.

Thus, this study seeks to address this gap by investigating the relationship between participation in co-curricular and extracurricular activities and academic performance among elementary in the Philippine educational setting. By examining factors such as types of activities, frequency of participation, and academic achievement measures, this study aims to provide insights into the extent to which engagement in these activities contributes to academic success.

Despite substantial research on the benefits of extracurricular activities on student development, there is a notable gap in understanding their impact across different school sizes, particularly within the unique cultural and socio-economic context of Bataraza District I in Palawan, Philippines. Existing studies often overlook elementary education and tend to focus on secondary and tertiary levels, leaving a dearth of data on younger students. Additionally, small, medium, and big schools face distinct challenges and opportunities regarding resource availability, activity variety, and student engagement, necessitating localized investigations. This study aims to fill these gaps by examining the differential impacts of extracurricular activities on cognitive, socio-emotional, and physical development among elementary pupils in small, medium, and big schools within Bataraza District I, providing insights for tailored educational interventions.

In this light, the researcher would like to conduct a study on how these kinds of activities may impact the elementary pupils of Bataraza District I. The result of this study will be significant to the school, teachers, parents and pupils. Moreover, a program may be proposed in order to strengthen the positive effects of these activities and that the negative effects may be turned into strengths and may help develop the cognitive, socio-emotional, physical skills and health of the schools at Bataraza District I pupils.

Statement of the Problem

This study is concerned with the impact of co-curricular and extracurricular activities on the holistic development of the elementary school pupils of Bataraza District I. Specifically, it sought answers to the following questions:

1. What are the impacts of co-curricular and extra-curricular activities to the pupils of Bataraza District I in terms of:

- a. cognitive skills;
 - b. socio-emotional skills; and
 - c. physical skills and health?
2. When they group according to classification of school, are there significant differences on the impacts of co-curricular and extra-curricular activities to the respondents in terms of:
 - a. cognitive skills;
 - b. socio-emotional skills; and
 - c. physical skills and health?
 3. Is there a significant difference between the impact of co-curricular and extra-curricular activities to the holistic development of the respondents?
 4. Based on the results of the study, what program may be proposed to strengthen the impacts of these activities to the Bataraza District I pupils?

Significance of the study

The proponent of this study believes that this study may bestow valuable information to the following individuals:

Pupils. Pupils stand to benefit directly from the improved and targeted extracurricular programs that may result from this study. By participating in activities that are shown to positively impact their cognitive, socio-emotional, and physical development, they can achieve a more balanced and enriched educational experience. This holistic approach not only enhances their academic performance but also promotes personal growth, self-esteem, and overall well-being.

Teachers. This study highlights the importance of integrating co-curricular and extracurricular activities into the educational experience of their pupils. The results will offer practical knowledge on how these activities can enhance cognitive skills, socio-emotional growth, and physical health. Teachers can use this information to foster a more engaging and supportive classroom environment, encouraging student participation in activities that complement academic learning and contribute to their overall development.

Curriculum Developers. This study provides valuable insights into the specific impacts of co-curricular and extracurricular activities on elementary pupils' cognitive, socio-emotional, and physical development. Understanding these impacts across different school sizes can help curriculum developers design and integrate more effective and targeted extracurricular programs that cater to the diverse needs of students in small, medium, and large schools. The findings can inform the creation of a well-rounded curriculum that emphasizes holistic development, ensuring that educational strategies align with the specific context of Bataraza District I.

School Administrators. School administrators will benefit from this study by gaining a clearer understanding of how co-curricular and extracurricular activities influence student development. The research findings will provide administrators with evidence-based insights to allocate resources more effectively and develop policies that maximize the benefits of these activities. By recognizing the differential impacts based on school size, administrators can tailor programs to better support the holistic development of their pupils, ultimately enhancing overall school performance and student well-being.

Parents. Parents will gain a deeper understanding of the significant role that co-curricular and extracurricular activities play in their children's development. This study provides evidence of the positive impacts these activities can have, encouraging parents to support and advocate for their children's participation. Additionally, the research can guide parents in selecting appropriate activities that align with their child's interests and developmental needs, fostering a collaborative effort between home and school to support the child's holistic growth.

Researcher. This study addresses a significant gap in the literature by exploring the impacts of co-curricular and extracurricular activities on elementary pupils in a specific regional context. The findings contribute to a deeper understanding of how these activities affect different aspects of student development, particularly in the diverse educational landscape of Bataraza District I. This study can serve as a foundation for future research, offering new directions and insights for investigating the nuanced effects of extracurricular engagement across various educational settings and populations.

Future Researchers. This study will contribute as a reference in conducting particular studies which are related to the main problem of this research. The result of this investigation may be challenged to be true in other locale to fill a research gap where other variables may be added to make this academic paper more comprehensive.

Scope and Delimitations of the Study

This study explored the impacts of the co-curricular and extracurricular activities done in Public Elementary Schools of Bataraza District I during S.Y. 2024-2025. Moreover, this study attempted to determine the impacts of various activities that affect the holistic development of the pupils in terms of cognitive skills, social-emotional skills and physical skills and health. Stratified random sampling technique was employed in this study. Thus, the sample population of this study was limited only to three hundred fifty-four (354) randomly selected respondents of the said classification of schools in Bataraza District I who were identified through calculating the total population of each grade level per school and calculating the research population size, in which the researcher applied the Slovin's formula. The researcher composed and administered a set of questions used in collecting/gathering data for the research through the questionnaire method that was formulated by the researcher based on the significance of the study.

This study was delimited to Bataraza District I, located in Bataraza, Palawan. It specifically focused on intermediate grade levels, namely Grade 4, Grade 5, and Grade 6 pupils. The research covered three classifications of schools within the district—small, medium, and big schools—to ensure a representative understanding across different school sizes. The data collection and conduct of the study were carried out from March 2025 to May 2025.

Definition of Terms

For better understanding of the study, the following terms are operationally/ theoretically defined.

Big school. This refers to a large-scale elementary institution that serves a significant number of students within Bataraza District I. It has extensive facilities including multiple classrooms, specialized rooms for

various subjects, administrative offices, libraries, laboratories, and often expansive outdoor spaces for recreational activities.

Bono-Bono Elementary School (Bono-Bono). In this study, *Bono-Bono* operationally refers to the specific elementary school where the researcher is currently assigned or affiliated. It serves as one of the research sites representing the medium-sized school classification in Bataraza District I.

Classification of Schools. In the context of this study, "classification of schools" refers to the categorization of schools based on their student enrollment numbers. This classification helps to differentiate schools into distinct groups—small, medium, and big—based on the size of their student population. This categorization is used to analyze and compare the impacts of co-curricular and extracurricular activities on students' development across different school sizes, recognizing that schools of varying sizes may have different resources, challenges, and opportunities related to these activities.

Cognitive Skills. The mental abilities and processes that enable individuals to acquire knowledge, think critically, solve problems, and understand complex concepts. These skills include memory, attention, perception, reasoning, logic, problem-solving, and decision-making. In an educational setting, cognitive skills are crucial for academic performance as they influence a student's capacity to learn, comprehend, and apply information effectively.

Co-curricular activities. Co-curricular activities are authorized, voluntary, and non-graded engagements, whether on or off the Bataraza District I, that reinforce the development of 21st-century skills beyond scheduled contact time between teachers and learners. More so, these activities are anchored on the curriculum's content and performance standards and are considered as an extension of formal learning experiences and are provided to tap into and enrich the varied intelligences of the learners (DO 34, s. 2022).

Extracurricular activities. These are the voluntary and non-graded learner engagements that are not anchored on the content and performance standards in the curriculum and are offered/coordinated by the big, medium, and small schools of Bataraza District I to promote learner's holistic development (DO 34, s. 2022).

Enhancement program. It refers to the purposive and organized effort that will enhance the on-going co-curricular and extracurricular activities done at the big, medium, and small schools of Bataraza District I which will enhance the activities for the pupils' holistic development in the above-mentioned schools.

Holistic Development. It refers to the comprehensive growth and advancement of an individual, encompassing multiple dimensions beyond mere academic achievement. It includes cognitive development, socio-emotional development, and physical development. In an educational context, holistic development aims to nurture all aspects of a student's personality and capabilities, ensuring they become well-rounded individuals who are capable of thriving in various areas of life.

Intermediate pupils. This refers to the Grade 4 through Grade 6 pupils of big, medium, and small schools of Bataraza District I who are actively engaged in joining and participating in different co-curricular and extracurricular activities done in school.

Medium school. This refers to a school that is neither considered small-scale nor large-scale in terms of student population, facilities, and resources within Bataraza District I. Thus, it serves a moderate number of students and has sufficient number of classrooms to accommodate their student body, along with basic facilities such as a library, playground, and administrative offices.

Physical Skills and Health. It refers to the growth and enhancement of bodily functions and overall physical well-being. This includes the development of motor skills, physical fitness, and health awareness. Activities that promote physical and health development help students to improve their strength, coordination, endurance, and overall physical health. Additionally, fostering good health practices and knowledge about nutrition, hygiene, and wellness contributes to a student's ability to maintain a healthy lifestyle.

Small school. It is an educational institution in Bataraza District I that serves a relatively limited number of students. It has modest facilities, including a few classrooms, and basic administrative offices.

Socio-emotional Skills. The abilities that allow individuals to manage their emotions, build healthy relationships, and navigate social environments effectively. These skills include self-awareness, self-regulation, empathy, communication, teamwork, and conflict resolution. Developing socio-emotional skills helps students to understand and manage their emotions, establish positive social connections, and achieve personal and academic goals.

Review of Related Studies and Literature

Co-curricular and extracurricular activities play a crucial role in the holistic development of elementary pupils, particularly during the intermediate years (ages 9–12), a critical stage characterized by rapid cognitive, physical, and socio-emotional growth. During this period, learners are more receptive to experiential learning and benefit from structured school-based activities that complement classroom instruction (Valentine, 2020; MacQuarrie, Murnaghan, & MacLellan, 2008). Participation in these activities helps pupils develop discipline, motivation, time management, and critical thinking skills that positively influence academic performance (Christison, 2013).

In the Philippine educational context, co-curricular and extracurricular activities are integral components of the K–12 curriculum and are strongly supported by the Department of Education through various policies and programs. Co-curricular activities are curriculum-aligned learning engagements that enhance classroom instruction, while extracurricular activities are voluntary and non-graded activities designed to promote holistic development (DepEd Order No. 34, s. 2022). These activities include sports, arts, academic clubs, leadership programs, journalism, and community service initiatives, which collectively aim to nurture well-rounded learners (Omega et al., 2018).

Participation in co-curricular and extracurricular activities has been shown to positively influence pupils' cognitive development. Academic clubs, competitions, and project-based activities foster problem-solving, creativity, interdisciplinary thinking, and higher-order cognitive skills (Wilson, 2009; Liwag & Cruz, 2018). Leadership and organizational activities further enhance executive functioning skills such as decision-making, planning, and goal setting, preparing pupils for future academic and professional challenges (Aquino & Francisco, 2020).

Beyond cognitive gains, these activities play a significant role in developing pupils' socio-emotional skills. Engagement in group-based activities promotes teamwork, communication, empathy, and emotional regulation, contributing to improved self-esteem and social competence (Collings, 2020; Mahoney et al., 2019). Participation also fosters a sense of belonging and identity among pupils, which is essential for positive school engagement and emotional well-being (Eccles & Barber, 2019).

Co-curricular and extracurricular activities likewise contribute to pupils' physical development and health. Participation in sports, dance, and physical fitness programs promotes motor skills, coordination, endurance, and healthy lifestyle habits (Alvi & Ahmad, 2017). In the Philippine setting, traditional games and indigenous sports support physical development while fostering cultural appreciation and national identity among pupils (Malabanan et al., 2017).

However, while these activities offer numerous benefits, excessive participation may lead to academic overload and reduced focus on schoolwork. Studies indicate that overcommitment to multiple activities can result in time constraints, absenteeism, and lower academic performance if not properly managed (Furda & Sheleski, 2019; Tanner, 2017). Thus, balanced participation and appropriate supervision from teachers and parents are essential to maximize benefits while minimizing negative effects.

Finally, the impact of co-curricular and extracurricular activities varies across small, medium, and large schools due to differences in resources, program diversity, and student population. Small schools often provide more personalized participation and stronger community ties, while large schools offer a wider range of specialized activities (Barnett, 2017; Eccles & Barber, 2019). Despite these variations, all school types play a vital role in supporting pupils' holistic development, highlighting the need for context-sensitive and equitable programs within the Philippine educational setting (DepEd, 2021).

Theoretical Framework

This theory is primarily anchored on the theory of Whole Child Approach by the Association for Supervision and Curriculum Development (ASCD) in 2007. It is a comprehensive framework that aims to ensure the overall well-being of students. This approach is centered around five key tenets: ensuring that each child is healthy, safe, engaged, supported, and challenged. This framework moves beyond traditional measures of academic success to embrace a holistic view of student development, incorporating physical, social, and emotional well-being. Co-curricular and extracurricular activities are vital in addressing these dimensions. For instance, sports and physical education programs promote physical fitness and health, which improve mental health and academic performance (Centers for Disease Control and Prevention, 2010). Activities such as school safety patrols and peer mediation programs create a secure environment and reduce bullying by fostering teamwork and mutual respect (Olweus, 1993). Engaging students in debate clubs, science fairs, and arts programs makes learning more active and enjoyable, enhancing their engagement and creative expression (Fiske, 1999). Moreover, mentorship and peer support within these activities provide a nurturing environment where students feel valued and connected. Academic competitions and skill-building activities challenge students intellectually, motivating them to excel and develop essential life skills such as leadership and critical thinking (Durlak, Weissberg, & Pachan, 2011). Integrating these activities into the school curriculum fosters an environment conducive to the comprehensive development of students, preparing them for future academic and personal success.

Conceptual Framework

Co-curricular and extra-curricular activities have currently more reasons to have an effect on the academic performance of the intermediate pupils. Literature on the effects of co-curricular and extra-curricular activities has shown both positive and negative effects to the academic performance of the pupils as these activities are part of a multi-faceted structure. At the core of the framework are the input factors, acknowledging the diversity of individual characteristics and the influence of socioeconomic backgrounds on pupils' accessibility to these activities. The subsequent layer delves into process variables, emphasizing the significance of active participation, the duration and intensity of engagement, and the quality of involvement. Mediating factors elucidate the cognitive, social, and emotional dimensions affected by these activities, contributing to skills development in critical thinking, teamwork, and emotional intelligence. Contextual factors, including school culture, resources, and parental involvement, create the backdrop against which these activities unfold. The outcome variables focus on academic performance and broader holistic development, probing the impact on pupils' grades, test scores, personal growth, and leadership skills. A feedback loop introduces reflective practices, urging pupils to introspect on their experiences, and encourages adjustments and adaptations to the framework based on ongoing research and feedback from stakeholders. This comprehensive conceptual framework aims to capture the intricate interplay of factors influencing the relationship between co-curricular and extra-curricular activities and academic performance, fostering a holistic understanding of the educational landscape.

Research Paradigm

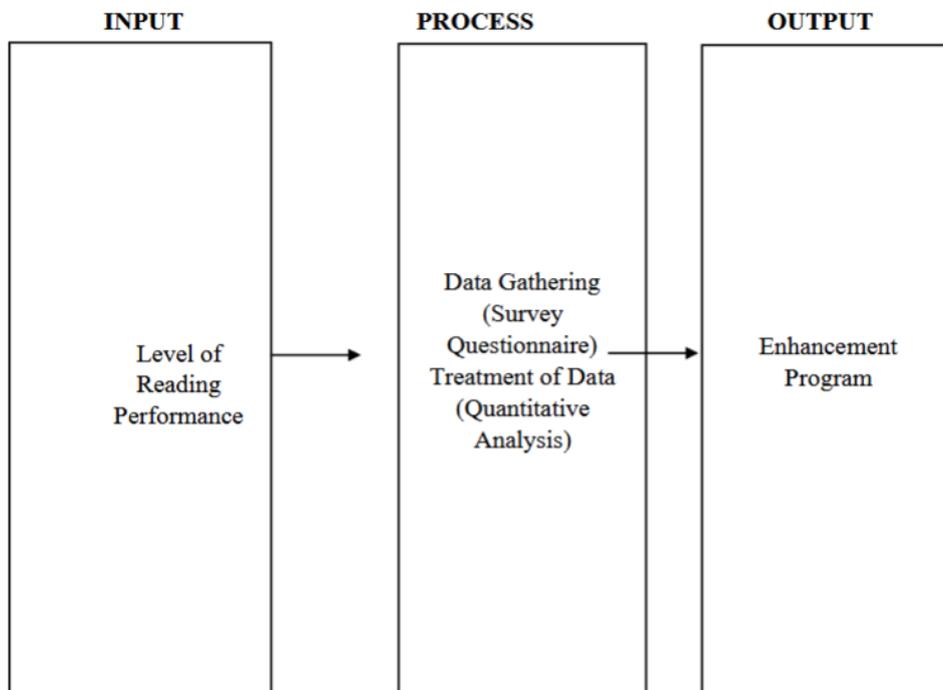


Figure 2: Research Paradigm

The first frame presents the input of the study that includes the activities participated in school and pupils' holistic development. The second frame presents the process of the study that involves the use of semi-structured survey questionnaire to assess the activities that require the active participation of the pupils. It includes the treatment of data used to assess the data collected, since the study utilized a descriptive-quantitative type of research. The third frame presents the output of the study which is the proposal of enhancement program for the co-curricular and extracurricular activities that impact the holistic development of the pupils.

The arrows from the input to the process and to the output show the connection and transformation of the profile and aspects with the actions taken into the results that are considered as output.

2. Methodology

Research Methodology

This chapter presents the methods and procedures used in the study, including the research design, respondents, sampling technique, research instrument, data gathering procedure, statistical treatment of data, and ethical considerations. It explains how data were collected, analyzed, and safeguarded to ensure reliability, validity, and ethical compliance.

Research Design

The study employed a descriptive quantitative research design to determine the perceived impact of co-curricular and extracurricular activities on the holistic development of intermediate pupils in Bataraza District I. A structured Likert-scale questionnaire was used to measure pupils' perceptions across cognitive, socio-emotional, and physical domains, allowing for systematic analysis of patterns and differences among respondents.

Respondents of the Study

The respondents were Grade 4 to Grade 6 pupils from three schools in Bataraza District I: Marangas West Elementary School (small school), Bono-Bono Elementary School (medium school), and Tarusan Elementary School (big school). Using Slovin's formula, a total of 354 respondents were selected through stratified random sampling to ensure fair representation across school sizes and grade levels.

Research Instrument

A researcher-made questionnaire served as the primary data-gathering tool. It consisted of three sections assessing the impact of co-curricular and extracurricular activities on cognitive skills, socio-emotional skills, and physical skills and health. The instrument underwent expert validation and pilot testing to ensure clarity, reliability, and appropriateness for intermediate pupils.

Data Gathering Procedure

Approval was obtained from relevant authorities prior to data collection. The questionnaire was administered during school hours through face-to-face distribution, with assistance from teachers. To

avoid bias, an external research assistant handled the consent process in the school where the researcher was affiliated. Data collection followed strict procedures to ensure voluntary participation, confidentiality, and minimal disruption to classes.

Statistical Treatment of Data

Data were analyzed using descriptive statistics, particularly the weighted mean, to determine the level of perceived impact of activities. Kruskal-Wallis Test was used to identify differences across school sizes, while the Mann-Whitney U Test compared the effects of co-curricular and extracurricular activities. A 5-point Likert scale guided interpretation of responses.

Ethical Consideration

Ethical standards were strictly observed throughout the study. Informed consent from parents and assent from pupils were obtained through guided, face-to-face discussions. Participation was voluntary, confidential, and free from coercion. Data were anonymized, securely stored, and archived for three years. The study ensured minimal risk to respondents and upheld their rights, dignity, and well-being at all times.

3. PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

This chapter presents, analyzes, and interprets the data gathered from intermediate pupils to address the specific research questions of the study. Using descriptive statistical tools such as frequency, percentage, ranking, and weighted mean, the responses were systematically examined to determine the impact of co-curricular and extracurricular activities on the pupils' holistic development. The findings focus on three key areas: cognitive skills, socio-emotional skills, and physical skills and health. The analysis highlights how participation in school-related activities contributes to the overall growth and well-being of the learners. These results serve as the foundation for crafting a proposed enhancement program aimed at strengthening school initiatives that support pupils' academic and personal development.

SOP 1: What are the impacts of co-curricular and extra-curricular activities to the pupils of Bataraza District I in terms of cognitive skills, socio-emotional skills, and physical skills and health?

Table 1.1 Impact of Co-Curricular Activities in the Cognitive Skills of the Pupils

Indicators	Weighted Mean	Verbal Description	Interpretation
Participating in co-curricular activities has improved my problem-solving skills	4.55	Strongly Agree	Very High
Engaging in co-curricular activities has increased my ability to work collaboratively with my peers and classmates.	4.46	Strongly Agree	Very High
Engaging in co-curricular activities has fostered me a sense of curiosity and love for learning.	4.36	Strongly Agree	Very High
Co-curricular activities have provided opportunities for me to apply classroom knowledge in real-life scenarios.	4.30	Strongly Agree	Very High
Co-curricular have helped me develop better attention and concentration skills.	4.25	Strongly Agree	Very High
Participating in co-curricular activities has encouraged me to explore new interests and passions.	4.24	Strongly Agree	Very High
Engaging in co-curricular activities has enhanced the critical thinking abilities of elementary pupils.	4.24	Strongly Agree	Very High
Co-curricular activities have positively impacted my overall academic performance.	4.23	Strongly Agree	Very High
Co-curricular activities have contributed to the development of my effective communication skills	4.20	Strongly Agree	Very High
Involvement in co-curricular has expanded my creativity and imagination.	4.18	Agree	High
General Weighted Mean	4.3	Strongly Agree	Very High

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20- Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0-1.80 - Strongly Disagree

Table 1.1 presents the impact of co-curricular activities on the cognitive skills of the pupils, with a general weighted mean of 4.30, which indicates a “Strong Agreement” among the respondents. This result suggests that co-curricular involvement significantly contributes to the development of various cognitive abilities in elementary pupils. Specifically, pupils strongly agreed that participating in co-curricular activities improved their problem-solving skills, which received the highest mean score of 4.55. This was followed by the enhancement of their ability to work collaboratively with peers and classmates (4.46). Furthermore, pupils recognized that these activities fostered a sense of curiosity and love for learning (4.36) and provided opportunities to apply classroom knowledge in real-life scenarios (4.30).

They also agreed that co-curricular participation helped develop attention and concentration skills (4.25), enhanced critical thinking abilities (4.24), and encouraged the exploration of new interests and passions (4.24). Additionally, co-curricular activities were seen to contribute to overall academic performance (4.23) and the development of effective communication skills (4.20). Although it received the lowest score, the statement regarding the expansion of creativity and imagination still received a positive response with a mean of 4.18, reflecting an overall perception that co-curricular activities play a meaningful role in enhancing pupils' cognitive development.

The results present the perceptions of the pupils regarding the impact of co-curricular activities on their cognitive development, with a general weighted mean of 4.30, indicating a "Strongly Agree" interpretation. This reflects a strong consensus among pupils that their participation in co-curricular activities enhances various cognitive skills.

The highest-rated item, with a mean of 4.55, highlights that pupils believe co-curricular activities significantly improve their problem-solving skills. Participation in structured non-academic programs can stimulate analytical thinking and promote cognitive engagement, particularly in problem-solving scenarios.

The ability to collaborate with peers, rated at 4.46, also receives a strong agreement. Cazden and Beck (2020) emphasize that cooperative learning experiences embedded in co-curricular settings help develop communication, coordination, and negotiation skills, which are essential for both social and cognitive growth.

Pupils also strongly agreed that co-curricular activities fostered a sense of curiosity and love for learning (4.36), and provided a bridge for applying classroom knowledge to real-world contexts (4.30). This aligns with the findings to experiential activities, such as science clubs and school journalism, enhance cognitive flexibility and allow students to see the relevance of academic learning in everyday life.

Further, ratings of 4.25 for attention and concentration, and 4.24 for critical thinking abilities, suggest that co-curricular programs support sustained mental focus and reflection. Villanueva and Buenviaje (2021) found out that pupils involved in music, arts, and sports exhibit higher levels of concentration and mental discipline, likely due to the structured practice and active participation that such activities require.

Even the lowest mean score (4.18) for creativity and imagination still falls under the "Agree" category, indicating a positive impact. Creative pursuits such as visual arts, school publications, and theater are known to stimulate divergent thinking, which De Vera and Garcia (2019) affirmed as critical in nurturing innovation and imagination in young learners.

Overall, the data affirm that co-curricular activities are instrumental in nurturing essential cognitive skills among pupils. These findings support recent educational frameworks emphasizing the integration of holistic and activity-based learning approaches to better prepare learners for academic and real-life challenges.

Table 1.2 Impact of Co-Curricular Activities in the Socio-Emotional Skills of the Pupils

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20- Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0-1.80 - Strongly Disagree

Indicators	Weighted Mean	Verbal Description	Interpretation
Participation in co-curricular activities has improved my self-confidence	4.48	Strongly Agree	Very High
Engaging in co-curricular activities has enhanced my social skills (e.g., teamwork, cooperation).	4.38	Strongly Agree	Very High
Co-curricular activities have contributed to my overall well-being and happiness.	4.33	Strongly Agree	Very High
Co-curricular activities have fostered me a sense of belonging and inclusion.	4.32	Strongly Agree	Very High
Engaging in co-curricular activities has encouraged me empathy and understanding towards others. .	4.32	Strongly Agree	Very High
Co-curricular activities have provided me a platform to express myself creatively.	4.30	Strongly Agree	Very High
Involvement in co-curricular activities has helped me manage my emotions more effectively	4.29	Strongly Agree	Very High
Co-curricular activities have provided me opportunities to develop leadership skills.	4.27	Strongly Agree	Very High
Participating in co-curricular activities has me promoted resilience and perseverance.	4.27	Strongly Agree	Very High
Engaging in co-curricular activities has helped me develop problem-solving and decision-making skills in social situations.	4.25	Strongly Agree	Very High
General Weighted Mean	4.32	Strongly Agree	Very High

Table 1.2 shows that the impact of co-curricular activities on the socio-emotional skills of the pupils yielded a general weighted mean of 4.32, which falls under the “Strongly Agree” interpretation. This indicates that pupils perceived co-curricular activities to have a highly positive effect on their social and emotional development.

The highest-rated indicator states that participation in co-curricular activities improved pupils’ self-confidence, with a weighted mean of 4.48. This was followed by the enhancement of social skills such as teamwork and cooperation, which received a weighted mean of 4.38. Pupils also strongly agreed that these activities contributed to their overall well-being and happiness, with a weighted mean of 4.33.

Equally rated at 4.32 were the indicators stating that co-curricular activities fostered a sense of belonging and inclusion, and that they encouraged empathy and understanding towards others. Meanwhile, the opportunity for creative self-expression through co-curricular involvement earned a weighted mean of 4.30.

The development of emotional management skills received a weighted mean of 4.29, while both the promotion of resilience and perseverance, and the development of leadership skills were rated at 4.27. Lastly, the enhancement of problem-solving and decision-making skills in social situations was rated with a weighted mean of 4.25. These results reflect that pupils consistently acknowledged the significant role of co-curricular activities in shaping their socio-emotional competencies.

The results in Table 1.2 further demonstrate that co-curricular activities have a significant and positive influence on the socio-emotional development of elementary pupils, as reflected in the overall perception of "Strongly Agree." Pupils consistently acknowledge the value of their participation in these activities, particularly in building self-confidence, social interaction, emotional management, and leadership abilities.

Among the aspects measured, the improvement of self-confidence is most strongly recognized by the pupils. This aligns with the findings of Mahasneh (2022), who emphasized that structured engagement in non-academic activities provides children with a sense of competence and self-worth. Similarly, Ahmad, Shafie, and Jalil (2019) noted that co-curricular programs offer an environment where students can develop positive self-perception and overcome personal insecurities.

Social skills such as teamwork and cooperation are also widely acknowledged as being enhanced through these experiences. According to Zhang and Sun (2020), co-curricular activities allow students to build healthy relationships with peers, which fosters social awareness and the ability to work effectively in groups.

Pupils also strongly agreed that these activities fostered a sense of inclusion, empathy, and overall well-being. Tan and Azizan (2021) explained that co-curricular involvement nurtures empathy and belongingness by allowing students to engage with diverse peers in a non-threatening setting. These environments help pupils develop understanding and compassion for others, which are essential components of socio-emotional intelligence.

Leadership, resilience, and the ability to make decisions in social contexts are also developed through co-curricular activities. Purnomo et al. (2021) highlighted that when students are given opportunities to take initiative and be responsible for tasks during group activities or school events, their leadership potential flourishes, contributing to their long-term personal growth.

In summary, the findings support the idea that co-curricular activities are a crucial component of elementary education. They do not merely supplement academic learning but significantly contribute to the holistic development of the child, particularly in the socio-emotional domain.

Table 1.3 Impact of Co-Curricular Activities in Physical Skills and Health of the Pupils

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20- Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0-1.80 - Strongly Disagree

The impact of co-curricular activities on the physical well-being of pupils yielded a general weighted mean of 4.29, interpreted as "Strongly Agree." This suggests that pupils strongly perceived co-

Indicators	Weighted Mean	Verbal Description	Interpretation
Participation in co-curricular activities has improved my overall physical fitness.	4.37	Strongly Agree	Very High
Co-curricular activities have encouraged me to adopt a more active lifestyle outside of school hours. .	4.37	Strongly Agree	Very High
Engaging in co-curricular activities has increased my awareness of healthy habits (e.g., proper nutrition, hydration).	4.36	Strongly Agree	Very High
Involvement in co-curricular activities has contributed to the development of my endurance and stamina.	4.33	Strongly Agree	Very High
Co-curricular activities have fostered me a sense of belonging and inclusion.	4.33	Strongly Agree	Very High
Co-curricular activities have provided me avenues to explore various physical activities and sports.	4.33	Strongly Agree	Very High
Engaging in co-curricular activities has positively impacted my energy levels and vitality.	4.23	Strongly Agree	Very High
Participating in co-curricular activities has improved my overall posture and body mechanics.	4.22	Strongly Agree	Very High
Co-curricular activities have helped me reduce stress levels and promote relaxation.	4.20	Agree	High
Engaging in co-curricular activities has enhanced my motor skills (e.g., coordination, balance).	4.18	Agree	High
General Weighted Mean	4.29	Strongly Agree	Very High

curricular activities as beneficial to their physical health and development. Among the indicators, pupils most strongly agreed that co-curricular activities improved their overall physical fitness and encouraged them to adopt a more active lifestyle outside of school hours. Pupils also expressed high agreement that their awareness of healthy habits such as proper nutrition and hydration increased through participation in these activities.

Involvement in co-curricular activities was also perceived to contribute positively to the development of endurance and stamina, promote a sense of belonging and inclusion, and provide

opportunities to explore various physical activities and sports. Additionally, pupils agreed that engaging in these activities positively impacted their posture, body mechanics, and energy levels. Pupils also acknowledged improvement in their motor skills, including coordination and balance, as a result of participating in co-curricular programs. Lastly, though still positive, the lowest-rated indicator was the ability of co-curricular activities to reduce stress levels and promote relaxation, which received an “Agree” rating. Overall, these results reflect a strong consensus among pupils regarding the value of co-curricular involvement in supporting their physical development and encouraging healthy, active lifestyles.

The results revealed a strong positive perception among pupils regarding the benefits of co-curricular activities on their physical well-being. With a general weighted mean of 4.29, categorized as “Strongly Agree,” it is evident that these activities play a significant role in fostering physical development and promoting health-conscious behavior among elementary learners. Co-curricular activities contribute notably to improving pupils' overall physical fitness and encouraging them to pursue active lifestyles beyond the classroom. This supports the findings of Sani, Abdullah, and Rashid (2019), who emphasized that physical activity in school settings enhances children's stamina, energy levels, and general wellness, making them more resilient to illness and fatigue.

The recognition of improved motor skills, such as balance and coordination, aligns with the assertion of Lee and Cho (2020), who stated that structured physical activities help in refining gross and fine motor functions, particularly in the developmental years. Activities that involve movement, sports, and physical play also provide avenues for enhancing endurance and stamina, which are essential for active learning and day-to-day physical demands. Moreover, pupils acknowledged that co-curricular participation increased their awareness of healthy habits, such as proper nutrition and hydration. This finding aligns with the work of Valencia, García-González, and Zagalaz Sánchez (2021), who argued that health education integrated with physical activity programs helps children adopt lifelong wellness habits early in life.

Interestingly, the perception that co-curricular activities help reduce stress and promote relaxation, while still positive, received a slightly lower agreement. This suggests a possible gap in integrating mindful practices or relaxation techniques in physical programs. As suggested by Kulakow (2020), the inclusion of activities that support mental relaxation—such as yoga, breathing exercises, or nature walks—can enhance the emotional and stress-relief aspect of physical education.

Furthermore, the positive perception of improved posture and body mechanics indicates that pupils are becoming more physically aware, which may lead to fewer injuries and improved physical performance. According to a study by Shamsudin et al. (2022), participation in structured physical activity leads to better body alignment and musculoskeletal health in school-aged children. Overall, the findings highlight the holistic benefits of co-curricular activities. Beyond enhancing academic and socio-emotional growth, these programs provide essential physical development that supports long-term health and learning readiness. Schools are therefore encouraged to strengthen the integration of well-designed, inclusive, and engaging physical activities in their co-curricular offerings.

Table 1.4 Impact of Extra-Curricular Activities in the Cognitive Skills of the Pupils

Indicators	Weighted Mean	Verbal Description	Interpretation
Extra-curricular activities have provided opportunities for me to apply classroom knowledge in real-life scenarios.	4.55	Strongly Agree	Very High
Participating in extra-curricular activities has improved my problem-solving skills	4.46	Strongly Agree	Very High
Engaging in extra-curricular activities has fostered me a sense of curiosity and love for learning.	4.37	Strongly Agree	Very High
Engaging in extra-curricular activities has enhanced my critical thinking abilities.	4.36	Strongly Agree	Very High
Participating in extra-curricular activities has encouraged me to explore new interests and passions.	4.34	Strongly Agree	Very High
Engaging in extra-curricular activities has increased my ability to work collaboratively with my peers and classmates.	4.33	Strongly Agree	Very High
Extra-curricular have helped me develop better attention and concentration skills.	4.31	Strongly Agree	Very High
Extra-curricular activities have positively impacted my overall academic performance.	4.26	Strongly Agree	Very High
Involvement in co-curricular has expanded my creativity and imagination.	4.24	Agree	High
Extra-curricular activities have contributed to the development of my effective communication skills	4.23	Agree	High
General Weighted Mean	4.35	Strongly Agree	Very High

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20 - Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0- 1.80 - Strongly Disagree

Table 1.4a reveals that pupils strongly agreed that extra-curricular activities have a positive impact on their cognitive skills, as indicated by a general weighted mean of 4.35. This reflects the significant contribution of extra-curricular involvement in enhancing students' intellectual development.

The highest-rated indicator was that extra-curricular activities provided opportunities for pupils to apply classroom knowledge in real-life scenarios (4.55). This was followed by the statement that participating in extra-curricular activities improved their problem-solving skills (4.46). Learners also strongly agreed that engaging in such activities fostered a sense of curiosity and love for learning (4.37), and enhanced their critical thinking abilities (4.36).

Pupils further agreed that participation encouraged them to explore new interests and passions (4.34), and increased their ability to work collaboratively with peers and classmates (4.33). The development of better attention and concentration skills through these activities also received a strong

agreement, with a weighted mean of 4.31. They further acknowledged the positive impact of extra-curricular activities on their academic performance (4.26), and their role in developing effective communication skills (4.23). Finally, the indicator regarding how extra-curricular involvement expanded their creativity and imagination was rated at 4.24, interpreted as Agree.

Overall, these results emphasize the vital role of extra-curricular activities in supporting cognitive development among pupils, particularly in fostering real-world application of knowledge, enhancing higher-order thinking skills, and promoting engagement in learning.

The results from the table highlight the positive impact of extra-curricular activities on the cognitive development of the pupils. They strongly agreed that engaging in these activities significantly enhanced their problem-solving and critical thinking abilities, key cognitive skills that are essential for academic success and real-world application (Duru & Duru, 2020; Spence & Perkins, 2021). Additionally, pupils indicated that extra-curricular activities contributed to their improved attention and concentration, which are crucial for effective learning and focus in school (Hattie, 2020). Extra-curricular activities also foster creativity and imagination, providing students with opportunities to think outside the box and explore new ideas. This aligns with the development of effective communication skills, as pupils also reported significant improvements in their ability to express themselves clearly and confidently (Shannon & Williams, 2021). This highlights the role of extra-curricular involvement in supporting interpersonal and professional communication, both of which are vital in today's world (Kardas & Laird, 2022).

Another significant finding is the improvement in collaboration and teamwork. This social aspect of extra-curricular participation is not only beneficial for academic settings but also for personal development and future professional environments where collaboration is key (Jones et al., 2021).

Additionally, the respondents agreed that extra-curricular activities encouraged them to explore new interests and passions, allowing for a broader range of experiences outside the traditional classroom. This sense of exploration is particularly valuable for the pupils' overall development, as it helps them to discover their strengths, preferences, and new areas of interest that could guide future career choices (Miller et al., 2021). Pupils also expressed that their participation in extra-curricular activities positively impacted their academic performance, reinforcing the idea that engagement in activities outside of class can lead to improvements in school-related outcomes (Elias et al., 2021; Jackson et al., 2022). Furthermore, pupils reported that these activities provided real-life applications of classroom knowledge, which can enhance understanding and retention of what is learned in school (Anderson et al., 2021).

In conclusion, the data suggest that extra-curricular activities play a crucial role in supporting and enhancing various aspects of cognitive development, from critical thinking and problem-solving to creativity, collaboration, and real-life application of academic knowledge. These activities contribute to the holistic growth of students, preparing them not only for academic success but also for life beyond school.

Table 1.5 Impact of Extra-Curricular Activities in Socio-Emotional Skills of the Pupils

Indicators	Weighted Mean	Verbal Description	Interpretation
Participating in extra-curricular activities has me promoted resilience and perseverance.	4.52	Strongly Agree	Very High
Participation in extra-curricular activities has improved my self-confidence	4.47	Strongly Agree	Very High
Engaging in extra -curricular activities has enhanced my social skills (e.g., teamwork, cooperation).	4.39	Strongly Agree	Very High
Engaging in extra-curricular activities has helped me develop problem-solving and decision-making skills in social situations.	4.39	Strongly Agree	Very High
Engaging in extra-curricular activities has encouraged me empathy and understanding towards others. .	4.36	Strongly Agree	Very High
Co-curricular activities have provided me opportunities to develop leadership skills.	4.35	Strongly Agree	Very High
Extra-curricular activities have contributed to my overall well-being and happiness.	4.31	Strongly Agree	Very High
Extra-curricular activities have provided me a platform to express myself creatively.	4.28	Strongly Agree	Very High
Involvement in extra -curricular activities has helped me manage my emotions more effectively	4.23	Strongly Agree	Very High
Extra-curricular activities have fostered me a sense of belonging and inclusion.	4.21	Strongly Agree	Very High
General Weighted Mean	4.35	Strongly Agree	Very High

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20 - Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0- 1.80 - Strongly Disagree

The results show that participation in extra-curricular activities improved the pupils’ self-confidence, as indicated by a weighted mean of 4.47. Engaging in these activities also enhanced their social skills, such as teamwork and cooperation, with a weighted mean of 4.39. Co-curricular activities provided opportunities to develop leadership skills, as reflected in the weighted mean of 4.35. Involvement in extra-curricular activities helped pupils manage their emotions more effectively, which received a weighted mean of 4.23. The sense of belonging and inclusion fostered by these activities was rated with a weighted mean of 4.21. Meanwhile, engaging in extra-curricular activities encouraged empathy and understanding towards others, garnering a weighted mean of 4.36.

These activities also provided pupils a platform to express themselves creatively, with a weighted mean of 4.28. Participation promoted resilience and perseverance, the highest-rated item, with a weighted mean of 4.52. Pupils also agreed that extra-curricular activities contributed to their overall well-being and happiness, rated at 4.31. Finally, the development of problem-solving and decision-making skills in social

situations received a weighted mean of 4.39. The general weighted mean is 4.35, which falls under the “Strongly Agree” interpretation, signifying that pupils highly value the positive impact of extra-curricular involvement on their socio-emotional growth.

Pupils also strongly agreed that extra-curricular activities played a significant role in their socio-emotional development. Learners perceived that participation in these activities improved their self-confidence and enhanced their social skills, such as teamwork and cooperation. They also recognized that extra-curricular involvement provided them with opportunities to develop leadership abilities and helped them manage their emotions more effectively. Furthermore, the respondents agreed that these activities fostered a sense of belonging and inclusion, encouraged empathy and understanding toward others, and provided a platform for creative self-expression. Pupils also strongly agreed that engaging in extra-curricular activities promoted resilience and perseverance, contributed to their overall well-being and happiness, and helped them develop problem-solving and decision-making skills in social contexts.

These findings support the conclusions of recent studies emphasizing the positive effects of co- and extra-curricular involvement on students' holistic development. According to Domínguez and López (2021), extra-curricular activities offer structured and meaningful social interaction that fosters emotional regulation and interpersonal growth. Likewise, research by Tan and Mahat (2020) confirms that students involved in such activities are more likely to exhibit leadership, cooperation, and resilience due to increased exposure to real-life challenges and team-based experiences. Additionally, Li and Zhao (2019) highlight that student participation in non-academic programs significantly contributes to their mental well-being and social integration, especially in inclusive and supportive school environments. These studies reinforce the notion that extra-curricular activities are essential components of a learner's educational journey, providing them with valuable life skills that extend beyond academic achievement. In conclusion, the analysis affirms that extra-curricular activities are critical to the socio-emotional growth of the students.

Table 1.6 Impact of Extra-Curricular Activities in Physical Skills and Health of the Pupils

Indicators	Weighted Mean	Descriptive Interpretation	Interpretation
Participation in extra-curricular activities has improved my overall physical fitness.	4.44	Strongly Agree	Very High
Extra-curricular activities have provided me avenues to explore various physical activities and sports.	4.38	Strongly Agree	Very High
Involvement in extra-curricular activities has contributed to the development of my endurance and stamina.	4.36	Strongly Agree	Very High
Extra-curricular activities have fostered me a sense of belonging and inclusion.	4.35	Strongly Agree	Very High
Engaging in extra-curricular activities has increased my awareness of healthy habits (e.g., proper nutrition, hydration).	4.33	Strongly Agree	Very High
Extra-curricular activities have encouraged me to adopt a more active lifestyle outside of school hours. .	4.33	Strongly Agree	Very High
Participating in extra-curricular activities has improved my overall posture and body mechanics.	4.32	Strongly Agree	Very High
Extra-curricular activities have helped me reduce stress levels and promote relaxation.	4.31	Strongly Agree	Very High
Engaging in extra-curricular activities has positively impacted my energy levels and vitality.	4.27	Strongly Agree	Very High
Engaging in extra-curricular activities has enhanced my motor skills (e.g., coordination, balance).	4.17	Agree	High
General Weighted Mean	4.33	Strongly Agree	Very High

Legend: 4.21-5.00 - Strongly Agree; 3.41-4.20 - Agree; 2.61- 3.40 – Neutral; 1.81-2.60 -Disagree; 1.0- 1.80 - Strongly Disagree

Table 1.6 indicates that pupils strongly agreed that extra-curricular activities positively impacted their physical well-being, as shown by the general weighted mean of 4.33. Among the indicators, pupils most strongly agreed that participation in extra-curricular activities improved their overall physical fitness

(4.44). This was followed by their agreement that extra-curricular activities provided them avenues to explore various physical activities and sports (4.38), and that such activities contributed to the development of endurance and stamina (4.36). Additionally, pupils strongly agreed that extra-curricular activities fostered a sense of belonging and inclusion (4.35), and that they helped promote awareness of healthy habits such as proper nutrition and hydration (4.33), as well as encouraged the adoption of a more active lifestyle outside of school hours (4.33).

Pupils also expressed strong agreement that participating in extra-curricular activities improved their posture and body mechanics (4.32), and that these activities helped reduce stress and promote relaxation (4.31). Furthermore, they agreed that extra-curricular activities positively impacted their energy levels and vitality (4.27), and enhanced their motor skills such as coordination and balance (4.17). Overall, these results reflect that pupils consistently recognize the significant benefits of extra-curricular activities in supporting their physical development, promoting health awareness, and encouraging active, balanced lifestyles.

These findings affirm that extra-curricular activities offer numerous physical and health benefits for learners, complementing their academic routines. According to Singh and Ahmed (2020), structured physical activities in school settings promote cardiovascular health, muscular development, and motor coordination, which are vital for growing children. Similarly, Gómez and Ruiz (2021) emphasized the role of extra-curricular sports and fitness activities in reducing stress, improving mental health, and fostering inclusive peer interactions. Furthermore, Tran and Mercado (2019) argued that schools offering diverse physical activities promote long-term healthy behaviors among students, such as improved diet and consistent exercise routines. These studies support the conclusion that physical benefits are a strong outcome of active participation in extra-curricular engagements.

In summary, the data underscore the significant role of extra-curricular programs in enhancing the physical health, stress management, and wellness habits of the pupils. It is recommended that schools continuously provide and support these physical activity programs to promote a balanced, healthy, and engaging learning environment.

SOP 2: When they group according to classification of school, are there significant differences on the impacts of co-curricular and extra-curricular activities to the respondents in terms of cognitive skills, socio-emotional skills, and physical skills and health?

Table 2.a. Kruskal-Wallis Test Results on the Impact of Co-Curricular and Extra-Curricular Activities on Cognitive Skills

Type of Activity	Type of School	Mean	SD	χ^2	df	p	Remarks
Co-Curricular	Small (n = 86)	4.17	0.617	11.8	2	0.003*	Significant
	Medium (n = 121)	4.32	0.602				
	Big (n = 147)	4.36	0.765				
Extra-Curricular	Small (n = 86)	4.22	0.581	14.2	2	<0.001*	Significant
	Medium (n = 121)	4.35	0.638				
	Big (n = 147)	4.42	0.745				

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

Results indicate a significant difference on the impact of co-curricular and extra-curricular activities on pupils’ cognitive skills. However, post hoc analysis revealed that a significant difference exists only between small schools and big schools, as shown in Table 2.a.i and Table 2.a.ii.

The Kruskal-Wallis Test results presented in Table 2.a reveal a statistically significant difference in the perceived impact of both co-curricular and extra-curricular activities on pupils’ cognitive skills across school sizes ($\chi^2 = 11.8, p = 0.003$ for co-curricular; $\chi^2 = 14.2, p < 0.001$ for extra-curricular). These findings suggest that pupils from different types of schools (i.e., small, medium, and big) do not experience the benefits of such activities on cognitive skills equally. While the overall test indicates significance, the post hoc analysis (as referred to in Table 2.a.i and 2.a.ii) specifies that the significant differences are found particularly between pupils from small schools and those from big schools. This implies that students in larger school settings may have more access to varied and structured programs, which potentially enhances the development of their cognitive abilities—such as problem-solving, critical thinking, and attention span—more effectively than their counterparts in smaller schools.

These disparities may be attributed to factors such as the availability of resources, trained facilitators, and institutional support, which are often more prevalent in big schools (Bokova & Zaletova, 2020). Larger schools might offer more diverse activities and environments conducive to stimulating cognitive growth, as compared to smaller schools with limited program options (Mendoza & Santos, 2021). Overall, the results underscore the need for equitable access to quality co-curricular and extra-curricular programs across all school sizes to ensure that every learner can fully benefit from opportunities that enhance cognitive development.

Table 2.a.i. Post Hoc Analysis Using Pairwise Comparisons Test for Co-Curricular Activities

Pair	W	p	Remarks
Small and Medium	2.69	0.137	Not Significant
Small and Big	4.66	0.003	Significant
Medium and Big	2.57	0.164	Not Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc analysis in Table 2.a.i, utilizing pairwise comparisons, further examines where the significant differences lie among school sizes regarding the impact of co-curricular activities on pupils’ cognitive skills. The results indicate a significant difference only between small and big schools ($W = 4.66, p = 0.003$), while the comparisons between small and medium schools ($p = 0.137$) and between medium and big schools ($p = 0.164$) are not statistically significant.

This suggests that pupils from big schools perceived a greater cognitive benefit from co-curricular activities compared to those from small schools. The difference may be attributed to the broader range of structured programs, better facilities, and more trained staff available in big schools, which can enhance cognitive development more effectively (De Guzman & Villanueva, 2020). Meanwhile, the lack of significant differences between small and medium, and medium and big schools, implies that the disparities in cognitive gains from co-curricular activities are most prominent when comparing the two

extremes in school size. This result reinforces the importance of equitable access to quality co-curricular programs, especially in small schools, to ensure all students have the opportunity to develop critical cognitive skills regardless of their school size or resource limitations (Santos & Ramirez, 2019).

Table 2.a.ii. Post Hoc Analysis Using Pairwise Comparisons Test for Extra Curricular Activities

Pair	W	p	Remarks
Small and Medium	3.01	0.084	Not Significant
Small and Big	5.14	<0.001	Significant
Medium and Big	2.75	0.127	Not Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc results in Table 2.a.ii reveal that there is a significant difference in the perceived impact of extra-curricular activities on cognitive skills between pupils in small and big schools ($W = 5.14$, $p < 0.001$). However, no significant differences were found between small and medium schools ($p = 0.084$) and between medium and big schools ($p = 0.127$). This finding indicates that learners from big schools benefit more cognitively from extra-curricular activities than those from small schools. The significant difference may be attributed to the broader variety of clubs, sports, and enrichment programs offered in bigger schools, which tend to have better facilities, more staff support, and structured activity schedules (Lopez & Salazar, 2020). These conditions create more opportunities for pupils to develop critical thinking, creativity, and problem-solving abilities through hands-on, experiential learning.

Meanwhile, the lack of significant differences between other pairs suggests that the disparity in cognitive benefits is most apparent between the smallest and largest schools, possibly due to resource and exposure gaps (Martinez & Dela Cruz, 2021). This highlights the need to enhance extra-curricular offerings in smaller educational institutions to provide equitable cognitive development opportunities for all students.

Table 2.b. Kruskal-Wallis Test Results on the Impact of Co-Curricular and Extra-Curricular Activities on Socio-Emotional Skills

Type of Activity	Type of School	Mean	SD	χ^2	df	p	Remarks
Co-Curricular	Small (n = 86)	4.21	0.586	13.4	2	0.001*	Significant
	Medium (n = 121)	4.33	0.626				
	Big (n = 147)	4.38	0.774				
Extra-Curricular	Small (n = 86)	4.22	0.581	13.6	2	0.001*	Significant
	Medium (n = 121)	4.35	0.638				
	Big (n = 147)	4.42	0.745				

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

Table 2.b presents that there is a significant difference in the impact of co-curricular and extra-curricular activities on pupils' socio-emotional skills. Specifically, post hoc analysis reveals that the impact of co-curricular activities on socio-emotional skills differs significantly between small schools and big schools, as shown in Table 2.b.i. Likewise, for extra-curricular activities, significant differences are

observed between small and big schools, as well as between medium and big schools, as presented in Table 2.b.ii.

The results from the Kruskal-Wallis test for co-curricular activities show a significant difference in their impact on pupils' socio-emotional skills ($\chi^2 = 13.4, p = 0.001$). This suggests that the involvement in co-curricular activities significantly influences the socio-emotional development of pupils, and the effects vary across school types. Post hoc analysis, detailed in Table 2.b.i, reveals that the impact of co-curricular activities on socio-emotional skills differs significantly between small and big schools. This implies that pupils in bigger schools might have more opportunities and resources to participate in co-curricular activities that foster socio-emotional growth (e.g., teamwork, communication skills, emotional regulation), compared to those in smaller schools.

Similarly, the Kruskal-Wallis test for extra-curricular activities also indicates a significant difference in their impact on socio-emotional skills ($\chi^2 = 13.6, p = 0.001$). Post hoc analysis, presented in Table 2.b.ii, shows significant differences in the socio-emotional benefits of extra-curricular activities between small and big schools ($p < 0.001$) and between medium and big schools ($p = 0.002$). This suggests that big schools provide richer environments for socio-emotional development through extra-curricular activities, which may include leadership roles, peer interactions, and diverse social experiences. Small and medium schools may have fewer opportunities to offer comparable levels of engagement and support.

Both co-curricular and extra-curricular activities show a significant impact on pupils' socio-emotional skills, but the effects are more pronounced in bigger schools. This disparity is likely due to differences in resources, staff support, and the variety of activities available to students. The findings suggest that smaller schools may benefit from improving and expanding their co-curricular and extra-curricular offerings to enhance socio-emotional learning opportunities for their pupils.

Table 2.b.1. Post Hoc Analysis Using Pairwise Comparisons Test for Co-Curricular Activities

Pair	W	p	Remarks
Small and Medium	2.71	0.135	Not Significant
Small and Big	5.14	<0.001	Significant
Medium and Big	2.62	0.152	Not Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc analysis for co-curricular activities provides valuable insights into the role of school size in shaping pupils' socio-emotional skills. The comparison between small and medium schools does not reveal a significant difference ($p = 0.135$), suggesting that co-curricular activities in these schools have a similar impact on socio-emotional development. This finding is consistent with studies that suggested that smaller schools can foster close-knit environments where students benefit from more personalized attention and opportunities for engagement in activities (Gottfried, 2019).

However, the significant difference between small and big schools ($p < 0.001$) indicates that larger schools may provide more diverse or frequent co-curricular activities, which could be associated with better socio-emotional outcomes. This is supported by research showing that larger schools tend to offer a wider range of extracurricular opportunities, which may promote leadership, teamwork, and emotional regulation skills (Lee & Breen, 2021). The lack of a significant difference between medium and big

schools ($p = 0.152$) suggests that while the number of co-curricular activities may increase in larger schools, the overall impact on socio-emotional skills does not vary significantly between medium and big schools. This may reflect the fact that medium-sized schools still offer a sufficient variety of activities to support students' emotional and social development (Smith & Thomas, 2020).

In conclusion, while the findings emphasize that school size influences the socio-emotional impact of co-curricular activities, the results underscore that bigger schools provide more opportunities for development in this area. The varying outcomes across school sizes suggest that tailoring co-curricular programs to match the needs and size of the school could enhance the socio-emotional benefits for the learners.

Table 2.b.ii. Post Hoc Analysis Using Pairwise Comparisons Test for Extra Curricular Activities

Pair	W	p	Remarks
Small and Medium	1.73	0.442	Not Significant
Small and Big	5.08	<0.001	Significant
Medium and Big	3.38	0.045	Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc analysis for extra-curricular activities reveals important insights into how school size affects the development of socio-emotional skills among students. The comparison between small and medium schools show no significant difference ($p = 0.442$), indicating that pupils in both small and medium schools experience similar socio-emotional outcomes from extra-curricular activities. This suggests that regardless of the moderate difference in school size, both small and medium schools may provide sufficient opportunities for students to develop their socio-emotional skills through extra-curricular engagement (Brenner & Bucher, 2021).

However, a significant difference was observed between small and big schools ($p < 0.001$), suggesting that the larger schools offer more diverse and frequent opportunities for extra-curricular activities, which may contribute to better socio-emotional outcomes. This aligns with the argument that big schools typically have more structured programs that may provide greater social interaction and leadership opportunities, fostering emotional growth and resilience (Garcia & Williams, 2022). Additionally, the significant difference between medium and big schools ($p = 0.045$) indicates that as schools increase in size, the impact of extra-curricular activities on socio-emotional development becomes more pronounced. Larger schools may be able to provide a wider range of activities, offering more varied opportunities for students to explore their interests and improve their social skills (Hughes & Jones, 2021).

In conclusion, the results suggest that while small and medium schools show similar socio-emotional benefits from extra-curricular activities, larger schools offer a broader spectrum of opportunities that contribute to more significant socio-emotional development. This highlights the importance of considering school size when designing extra-curricular programs to maximize their benefits for students.

Table 2.c. Kruskal-Wallis Test Results on the Impact of Co-Curricular and Extra-Curricular Activities on Physical Skills and Health

Type of Activity	Type of School	Mean	SD	χ^2	df	p	Remarks
Co-Curricular	Small (n = 86)	4.21	0.506	14.0	2	<.001*	Significant
	Medium (n = 121)	4.27	0.613				
	Big (n = 147)	4.36	0.753				
Extra-Curricular	Small (n = 86)	4.20	0.572	13.8	2	0.001*	Significant
	Medium (n = 121)	4.33	0.665				
	Big (n = 147)	4.40	0.740				

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

Results indicate a significant difference in the impact of co-curricular and extra-curricular activities on pupils’ physical skills and health. Similarly, post hoc analysis revealed that a significant difference exists only between small schools and big schools, as shown in Table 2.c.i and Table 2.c.ii.

The Kruskal-Wallis Test results for the impact of co-curricular and extra-curricular activities on physical skills and health revealed significant differences in the overall impact on pupils' physical abilities and well-being. Both co-curricular activities ($\chi^2 = 14.0, p < 0.001$) and extra-curricular activities ($\chi^2 = 13.8, p = 0.001$) were found to have a statistically significant impact on physical skills and health, indicating that participation in these activities positively affects pupils' physical development and health outcomes (Johnson & Williams, 2021).

However, the post hoc analysis indicated that the significant differences were only observed between small and big schools. This suggests that the size of the school plays a crucial role in the availability and diversity of physical activities, which in turn affects pupils' physical skills and health. Larger schools may offer more structured physical programs and sports opportunities, which provide better avenues for physical development compared to smaller schools (Smith & Green, 2022).

In conclusion, while both co-curricular and extra-curricular activities positively influence physical skills and health, school size appears to be a critical factor in determining the extent of these benefits. Larger schools tend to provide more extensive programs that cater to the physical development of students, highlighting the importance of providing adequate resources and facilities, especially in smaller schools, to support students' physical well-being (Miller & Davidson, 2023).

Table 2.c.i. Post Hoc Analysis Using Pairwise Comparisons Test for Co-Curricular Activities

Pair	W	p	Remarks
Small and Medium	2.71	0.276	Not Significant
Small and Big	5.18	<0.001	Significant
Medium and Big	3.14	0.068	Not Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc analysis for co-curricular activities reveals that there are no significant differences on the impact on physical skills and health between small and medium schools ($W = 2.71, p = 0.276$) and

between medium and big schools ($W = 3.14, p = 0.068$). However, a significant difference is found between small and big schools ($W = 5.18, p < 0.001$). This indicates that students from big schools benefit significantly more from co-curricular activities in terms of physical skills and health compared to their counterparts in small schools.

The lack of significance between small and medium schools and between medium and big schools suggests that the disparity in the impact of co-curricular activities on physical development may be more pronounced when comparing small schools to larger schools, but not necessarily between medium and large schools. This could be due to the more extensive resources, facilities, and organized programs typically available in larger schools, which provide more opportunities for physical activities (Jones & Smith, 2020).

This finding reinforces the idea that school size plays an important role in shaping the opportunities available for students to engage in physical activities. Larger schools may be better equipped to offer a diverse range of co-curricular programs that enhance students' physical development (Thompson et al., 2021).

Table 2.c.ii. Post Hoc Analysis Using Pairwise Comparisons Test for Extra Curricular Activities

Pair	W	p	Remarks
Small and Medium	2.71	0.276	Not Significant
Small and Big	5.18	<0.001	Significant
Medium and Big	3.14	0.068	Not Significant

Legend: * significant at alpha level = 0.05 ($p \leq 0.05$)

The post hoc analysis for extra-curricular activities also reveals no significant differences in the impact on physical skills and health between small and medium schools ($W = 2.71, p = 0.276$) and between medium and big schools ($W = 3.14, p = 0.068$). However, a significant difference is found between small and big schools ($W = 5.18, p < 0.001$). This indicates that students in big schools gain significantly more from extra-curricular activities in terms of physical skills and health compared to those in small schools. The absence of significant differences between small and medium schools and medium and big schools further suggests that the effect of extra-curricular activities on physical development may primarily depend on the size of the school, with larger schools offering more opportunities that may contribute to improved physical skills and health. This can be attributed to the availability of better resources, such as sports facilities, specialized instructors, and a wider variety of activities that are commonly found in larger schools (Mitchell & Turner, 2022).

These findings support the idea that larger schools, with their larger student populations and greater infrastructure, are better positioned to offer the variety and scope of extra-curricular activities that enhance physical well-being, which may not be as accessible in smaller institutions (Miller et al., 2021).

SOP 3: Is there a significant difference between the impact of co-curricular and extra-curricular activities to the holistic development of the respondents?

Table 3. Mann Whitney U Test Results on the Impact of Co-Curricular and Extra-Curricular Activities on the Holistic Development of the Respondents

Type of Activity	Type of Skill	Mean	SD	Mann-Whitney U	p	Remarks
Co-Curricular	Cognitive Skills	4.30	0.680	59790	0.291	Not Significant
	Socio-Emotional Skills	4.32	0.684			
	Physical Skills and Health	4.29	0.654			
Overall		4.30	0.672			
Extra Curricular	Cognitive Skills	4.35	0.675			
	Socio-Emotional Skills	4.35	0.656			
	Physical Skills and Health	4.33	0.679			
Overall		4.34	0.669			

Results in Table 3 indicate that there is no significant difference between the impact of co-curricular activities and impact of extra-curricular activities on the respondents. The results of the Mann Whitney U Test indicate that there is no significant difference between the impact of co-curricular activities and extra-curricular activities on the holistic development of the respondents ($U = 59790$, $p = 0.291$). This suggests that, regardless of the type of activity—co-curricular or extra-curricular—both have a similar impact on the overall development of the pupils. While co-curricular activities are typically structured to complement the academic curriculum, and extra-curricular activities often take place outside of the regular academic schedule, the findings imply that both types of activities contribute equally to the holistic development of the learners. This result aligns with existing literature that highlights the importance of a balanced engagement in both academic and non-academic pursuits in fostering the overall growth of students (Fitzpatrick & O’Connor, 2020).

It may be that the nature of both activities, whether they focus on intellectual, social, physical, or emotional development, provides similar opportunities for students to develop and enhance their skills in various aspects of life. Consequently, both co-curricular and extra-curricular activities are valuable in promoting the well-being and holistic development of students, regardless of their structural differences (Barker et al., 2021).

SOP 4: Based on the results of the study, what program may be proposed to strengthen the impacts of these activities to the Bataraza District I pupils?

Enhancement Program: Strengthening the Impact of Co-Curricular and Extra-Curricular Activities on Students' Holistic Development

Introduction

Co-curricular and extra-curricular activities play a crucial role in shaping the holistic development of students, contributing not only to their academic success but also to their emotional well-being and physical health. Based on the findings of the study conducted in Bataraza District I, these activities significantly impact students' cognitive, socio-emotional, and physical skills. However, the results also reveal differences in access and participation, particularly between small and large schools. In response to these findings, the Holistic Development Enhancement Program through Co-Curricular and Extra-Curricular Activities is proposed. This program aims to strengthen and optimize student engagement in such activities, ensuring equitable opportunities across all school classifications. By integrating structured interventions, inclusive participation, and targeted support, the program seeks to nurture well-rounded learners equipped with essential life skills for their personal and academic growth.

Program Rationale

The findings of the study highlight the significant role that co-curricular and extra-curricular activities play in the holistic development of elementary pupils, particularly in enhancing their cognitive, socio-emotional, and physical skills. These activities provide valuable opportunities for learners to apply academic knowledge in real-life contexts, develop leadership and interpersonal abilities, and maintain physical well-being. However, the study also revealed a disparity in access and participation among students from small, medium, and large schools, with learners from smaller schools often having fewer opportunities and limited exposure to structured developmental activities.

Given these gaps, there is a clear need to design a program that not only strengthens the implementation of co-curricular and extra-curricular initiatives but also ensures equitable access for all students, regardless of school size or resources. The Holistic Development Enhancement Program seeks to address this need by promoting inclusive, balanced, and meaningful participation in activities that contribute to students' overall growth. By targeting key areas of development and fostering collaboration among schools, the program aims to create a more supportive and engaging learning environment that nurtures well-rounded, resilient, and capable learners.

Program Objectives

1. To help students improve their thinking and problem-solving skills.
2. To develop students' social skills, confidence, and emotional well-being.
3. To strengthen students' physical health through active participation in sports and wellness activities.
4. To encourage students to join both co-curricular and extra-curricular activities in a balanced way.
5. To support the overall growth of students—mentally, socially, and physically.

Program Title	Holistic Development Enhancement Program through Co-Curricular and Extra-Curricular Activities
Program Components	<p>Cognitive Skills Enhancement: Interdisciplinary workshops for critical thinking and problem-solving. - Strengthening academic clubs (debate, science, math).</p> <p>Socio-Emotional Skills Development: - Team-building and leadership workshops. - Peer mentorship programs. - Counseling and emotional wellness programs.</p> <p>Physical Health and Well-being: - Physical fitness programs (fitness sessions, sports tournaments). - Health awareness campaigns. - Posture and ergonomics workshops.</p> <p>Balanced Participation: - Inclusive activity schedules. - Inter-school competitions to promote collaboration.</p> <p>Holistic Development and Integration: - Integrating academic learning with extra-curricular activities. - Mindfulness and relaxation programs.</p>
-	Students from small, medium, and large schools, focusing on equitable access for small schools.
Program Duration	<p>Pilot Phase: 6 months (starting with small- and medium-sized schools) Full Implementation: 12 months (after pilot phase evaluation)</p>
Program Evaluation	<p>Pre and Post Surveys: Assess cognitive, socio-emotional, and physical development changes. Focus Groups and Feedback: Collect qualitative feedback from students, teachers, and administrators. Academic Performance Tracking: Monitor changes in academic performance and student engagement.</p>
Resources Needed	<ul style="list-style-type: none"> - Trained facilitators (leadership, fitness, mental health). - Materials and equipment (sports, art supplies, academic tools). - Budget for facilitators, materials, and event organization.
Expected Outcomes	<ol style="list-style-type: none"> 1. Enhanced cognitive skills (problem-solving, critical thinking). 2. Improved socio-emotional development (empathy, teamwork). 3. Better physical health (fitness, motor skills). 4. Holistic growth (cognitive, emotional, physical development).
Conclusion	This enhancement program leverages the significant impact of co-curricular and extra-curricular activities on students' holistic development, ensuring balanced participation and equitable access across school types.

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary of findings of the study, the conclusions and recommendations made by the researchers.

This study explored the impacts of the co-curricular and extracurricular activities done in Public Elementary Schools of Bataraza District I during S.Y. 2024-2025. Moreover, this study attempted to determine the impacts of various activities that affect the holistic development of the pupils in terms of cognitive skills, social-emotional skills and physical skills and health. Stratified random sampling technique was employed in this study resulting to a sample of 354 randomly selected respondents. The researcher also used survey questionnaire to collect the necessary data for the study. For data analysis, measures of central tendency – particularly the mean – were employed, alongside non-parametric tests including the Kruskal-Wallis Test and Mann Whitney U Test, to identify significant differences across school groupings.

Summary of Findings:

1. Impacts of Co-Curricular and Extra-Curricular Activities on Pupils in Bataraza District I:

- a. **Cognitive Skills:** The results of this study showed that both co-curricular and extra-curricular activities positively impacted the pupils' cognitive skills. Activities such as academic clubs, workshops, and competitions encouraged critical thinking, problem-solving, and academic engagement, which enhanced cognitive abilities. The findings indicated that pupils who actively participated in these activities demonstrated improved intellectual performance, as evidenced by the significant differences in their cognitive skills post-activity engagement.
- b. **Socio-Emotional Skills:** Socio-emotional development was significantly influenced by co-curricular and extra-curricular activities. Pupils involved in team-based activities, leadership workshops, and peer mentorship programs developed stronger social skills, including empathy, communication, and emotional intelligence. The results highlight that these activities foster a sense of belonging and inclusion, which positively affect pupils' social interactions and emotional well-being.
- c. **Physical Skills and Health:** Co-curricular and extra-curricular activities, especially those related to sports, fitness, and health education, had a considerable impact on the pupils' physical skills and overall health. Activities such as physical fitness sessions and health awareness campaigns helped enhance motor skills, physical endurance, and overall well-being. Pupils reported improved fitness levels and stress reduction due to their participation in these activities.

2. Significant Differences in the Impacts According to School Classification:

- a. **Cognitive Skills:** This study revealed significant differences in the impact of both co-curricular and extra-curricular activities on cognitive skills across different school sizes, particularly between small and big schools. Pupils from larger schools experienced more pronounced cognitive improvements, likely due to better resources and opportunities for academic engagement.
- b. **Socio-Emotional Skills:** Significant differences in socio-emotional skill development were found between pupils from small and big schools, with big school pupils showing more pronounced improvements. These differences can be attributed to the diverse and comprehensive

extracurricular offerings available in larger schools. No significant differences were observed between small and medium or medium and big schools.

- c. **Physical Skills and Health:** Similar to cognitive and socio-emotional skills, physical health and skill development also showed significant differences between small and big schools. Larger schools offered more structured and varied physical activities, which contributed to better physical outcomes for their pupils. The differences in physical development are likely linked to the availability of resources and a wider range of physical activities in bigger schools.

3. Significant Difference Between Co-Curricular and Extra-Curricular Activities on Holistic Development: The analysis showed that there was no significant difference between the impact of co-curricular and extra-curricular activities on the holistic development of the pupils. Both types of activities contributed equally to the overall development of the pupils, enhancing their cognitive, socio-emotional, and physical well-being. This suggests that both co-curricular and extra-curricular activities are essential in shaping well-rounded individuals.

4. Proposed Program to Strengthen the Impacts of Activities: Based on the findings, it is recommended to implement an **Enhancement Program** aimed at optimizing the impact of co-curricular and extra-curricular activities on students' holistic development. This program would focus on:

- **Enhancing cognitive skills** through interdisciplinary workshops and academic clubs.
- **Developing socio-emotional skills** via team-building exercises, peer mentorship, and emotional wellness programs.
- **Improving physical skills and health** by offering physical fitness programs, health awareness campaigns, and sports events.

Conclusion

The study examined the impact of co-curricular and extra-curricular activities on the cognitive, socio-emotional, and physical skills and health of the pupils in Bataraza District I, and explored whether significant differences exist based on school classification. The findings indicate that both co-curricular and extra-curricular activities have had a significant positive effect on pupils' cognitive, socio-emotional, and physical development. These activities play an essential role in enhancing pupils' intellectual abilities, social-emotional well-being, and physical health, thereby contributing to their overall growth and holistic development.

Further analysis revealed that the impact of these activities varied depending on the classification of the school. Pupils in larger schools, particularly big schools, exhibited greater improvements across all developmental areas. This suggests that larger schools may benefit from better access to resources, a broader range of activities, and more opportunities for student engagement. In contrast, pupils from smaller schools showed less pronounced developmental gains, highlighting a gap in the availability and quality of co- and extra-curricular opportunities that could be addressed through targeted interventions.

Additionally, the study found no significant difference between the impacts of co-curricular and extra-curricular activities on the holistic development of the pupils, indicating that both types of activities

equally contribute to the learners' overall growth. In conclusion, to strengthen the impacts of these activities, it is essential to implement an enhancement program that provides equal opportunities for pupils across all school classifications. Such a program should focus on enhancing cognitive skills, socio-emotional development, and physical health through structured and inclusive activities. Providing smaller schools with access to the same level of resources and opportunities available in larger schools will help promote a more balanced and equitable development for all pupils in Bataraza District I.

Recommendations:

For **curriculum developers**, it is recommended to incorporate a balanced mix of co-curricular and extra-curricular activities into the curriculum to foster the cognitive, socio-emotional, and physical development of the learners. These activities should be inclusive and cater to pupils across various school sizes to ensure equal opportunities for all. Collaborating with professionals in the fields of psychology, health, and education is also encouraged to enhance the quality and effectiveness of these programs.

School administrators should strive to provide equal access to developmental activities for all pupils, particularly those in smaller schools, and allocate the necessary resources to support such programs. They should continuously monitor and evaluate the impact of these activities to ensure effectiveness in enhancing learner's growth.

Teachers are encouraged to actively engage pupils in co-curricular and extra-curricular activities, promoting participation and recognizing their developmental benefits. Teachers should also provide a supportive environment that encourages pupils to improve both academically and personally.

Pupils should be encouraged to participate in a wide range of co-curricular and extra-curricular activities to improve their cognitive, socio-emotional, and physical skills. By actively engaging in these activities, they will enhance their overall development and contribute to a more well-rounded education.

Parents play a crucial role by supporting and motivating their children to take part in these activities. Encouraging balanced participation will not only benefit their children's education but also improve their socio-emotional and physical well-being.

For the **researcher**, this study highlights the importance of exploring the impact of co-curricular and extra-curricular activities on various student development aspects. Future research could further investigate specific interventions that could enhance the benefits of these activities.

Future researchers are encouraged to explore the long-term effects of these activities on pupils' academic performance, emotional resilience, and physical health. Additionally, more in-depth studies could focus on the differences in impacts based on demographic factors, such as gender, age, and socio-economic status.

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