

Participation in School Extracurricular Activities and Its Impact on Academic Performance: An Analysis of Influencing Factors, Benefits, and Challenges

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Abstract: This qualitative systematic literature review examines the role of extracurricular activities in promoting students' holistic development within schools and universities. The study addresses the ongoing question of how participation in extracurricular and co-curricular programs influences both academic and non-academic outcomes. The purpose of this review is to synthesize existing evidence on the benefits, challenges, and best practices associated with extracurricular engagement. Using a systematic approach to identify and analyze peer-reviewed studies, the review highlights that participation in extracurricular activities enhances academic performance and supports the development of essential life skills, including leadership, communication, time management, and interpersonal competence. Key findings also reveal persistent challenges such as unequal access, limited resources, time constraints, and concerns about potential academic distractions. Despite these barriers, the literature consistently supports the integration of well-designed extracurricular programs as a means of promoting balanced educational experiences. The review concludes by emphasizing the need for inclusive, well-resourced, and student-centered extracurricular offerings that contribute to comprehensive student growth across educational levels.

Keywords: Extracurricular activities; Academic performance; Holistic education; Life skills development; Participation factors; Best practices in extracurricular programs.

1. INTRODUCTION

Educational development has long been understood as a multifaceted process that extends beyond the formal curriculum, encompassing both academic instruction and the broader experiences that shape a learner's growth (Entwistle, 1972). Within this paradigm, extracurricular and co-curricular activities (ECAs/CCAs) constitute an essential component of contemporary teaching and learning. These activities—broadly defined as structured, school-based engagements outside the prescribed academic curriculum, such as clubs, sports teams, community service, and leadership organizations—are integral to fostering holistic student development (Christison, 2013; Zaman, 2017). By providing platforms for active participation, they facilitate the acquisition of critical life skills, including discipline, perseverance, interpersonal competence, and social negotiation (Acquah & Anti Partey, 2014; Entwistle, 1972). The significance of this topic is underscored by consistent empirical evidence demonstrating that participation in such activities enhances learners' overall educational experience. Research links ECA/CCA involvement to improved academic performance, heightened self-esteem, lower dropout rates, and more positive mental health outcomes (Fujita, 2016; Gilman et al., 2014).

These engagements support cognitive development, build job-related competencies, and reduce problem behaviors by promoting pro-social conduct and resilience (Danial et al., 2012; Olson, 2015; Tan & Pope, 2017). Furthermore, they create vital opportunities for leadership and mentorship, strengthening students' sense of belonging and social capital (Fredricks & Eccles, 2016). In essence, a well-rounded education leverages these activities as alternative resources for meaningful engagement, enabling students to cultivate a positive character and expand their intellectual capacity beyond the classroom (Wangai, 2012; Zaman, 2017).

Despite this compelling evidence and their recognized value in educational policy and school programming, perceptions of ECAs and CCAs remain mixed among stakeholders. A persistent gap exists between the potential of these activities and their implementation. In many contexts, negative attitudes result in limited time allocation, inadequate funding, and undervaluation of their role (Wangai, 2012). Some students, parents, and even educators view them as distractions, arguing that they consume time better dedicated to academic work, a concern that points to a fundamental tension in educational priorities. This contradiction highlights a critical problem: while the benefits of ECAs/CCAs for holistic development are well-documented, systemic and perceptual barriers often prevent their equitable and effective integration into educational systems, potentially undermining their contribution to balanced student growth and optimal educational outcomes.

1.1 Statement of the Problem

While co-curricular activities (CCAs) are increasingly acknowledged within African education systems for their potential to nurture holistic development and foster critical social, emotional, and cognitive competencies beyond formal instruction (Moore, 2016), a significant and unresolved tension exists in both research and practice. The core problem is the lack of a coherent, evidence-based understanding of how participation in these activities fundamentally shapes learners' academic experiences and outcomes. Current literature presents a fragmented and contradictory landscape, revealing a critical knowledge gap. On one hand, a substantial body of research suggests that co-curricular involvement cultivates a stronger sense of school belonging, strengthens positive self-perception, and enhances overall student engagement—factors intrinsically linked to a productive learning environment (Ibiam & Enendu, 2015). Furthermore, other studies posit that these activities can directly bolster academic outcomes by instilling discipline, enhancing motivation, and promoting collaborative learning skills (Dearman, 2017; Granger, 2014). Conversely, a competing scholarly perspective raises legitimate concerns that such participation may inadvertently function as a double-edged sword. Critics argue that extracurricular engagements can compete for students' time and cognitive resources, potentially reducing focus on core academic tasks and creating role strain that undermines classroom performance (Mullen, 2016; Ibiam & Enendu, 2015). This dichotomous evidence—positioning CCAs as both an academic catalyst and a potential distraction—points to a profound lack of consensus. Therefore, the problem this study addresses is not merely whether CCAs affect academics, but under what conditions, through which mechanisms, and for which students these effects—positive, negative, or neutral—manifest. The existing ambiguity hinders the ability of educators, administrators, and policymakers to make informed decisions regarding the design, prioritization, and integration of these programs.

Without a synthesized and nuanced understanding that reconciles these contrasting perspectives, the strategic implementation of CCAs risks being either undervalued or misapplied, ultimately failing to realize their full potential for supporting comprehensive student success in African educational contexts and beyond.

1.2 Purpose of the Study

The purpose of this qualitative systematic literature review is to synthesize existing research on the influence of extracurricular and co-curricular activities on students' academic performance and holistic development within school and university settings. In light of conflicting findings in the literature, the study seeks to clarify the relationships between extracurricular participation, academic outcomes, and the broader social, emotional, and cognitive competencies that contribute to student growth. Additionally, the review aims to identify the challenges, barriers, and contextual factors that shape students' engagement in such activities, particularly within African educational environments. By integrating insights from diverse empirical studies, this review intends to provide educators, researchers, and policymakers with a clearer understanding of how extracurricular activities contribute to student development and how these programs can be designed and implemented more effectively.

1.3 Objectives of the Study

To address the stated purpose, the study is guided by the following objectives:

1. To examine the documented benefits of extracurricular and co-curricular activities in supporting students' holistic development.
2. To identify the factors that influence students' participation in extracurricular activities,
3. To analyze the challenges associated with extracurricular and within educational systems.
4. To explore the extent to which participation in extracurricular activities contributes to academic outcomes,
5. To review the best practices and effective models for implementing extracurricular programs in schools

1.4 Theoretical Framework

This study is informed by four interrelated theoretical perspectives that explain how extracurricular and co-curricular activities contribute to students' academic and holistic development. The Developmental Assets Framework suggests that structured school activities help students acquire internal and external assets—such as responsibility, self-management, and positive peer relationships—which are associated with favorable academic and behavioral outcomes (Fonneris et al 2015).). Similarly, Social Learning Theory posits that students learn behaviors and attitudes by observing and interacting with peers and adult role models in activity-based environments such as clubs, sports teams, and leadership groups (Coto, 2016). These settings expose learners to constructive social norms, collaboration, and collective problem-solving, thereby strengthening self-efficacy and reinforcing behaviors that support academic engagement. Complementing these views, Ecological Systems Theory emphasizes that students' development is shaped by multiple overlapping systems—including school, family, and community—suggesting that extracurricular activities influence not only school performance but also broader social contexts and support networks (Duerden & Witt 2010).

Engagement Theory further argues that meaningful involvement in school activities fosters behavioral, emotional, and cognitive engagement, which is linked to improved motivation, attendance, and academic achievement (Bundick, 2011).). Collectively, these theories provide a multidimensional lens for understanding how extracurricular participation enhances academic outcomes, shapes personal competencies, and interacts with contextual factors such as school climate and resource availability. They also guide the interpretation of this qualitative systematic review by offering theoretical explanations for both the benefits and the challenges associated with extracurricular involvement

2. LITERATURE REVIEW

2.1 Benefits of Extracurricular Activities in Schools

Extracurricular activities (ECAs) have long been regarded as vital components of holistic education, offering learning opportunities that extend beyond the formal classroom environment. Moreover, a growing body of literature highlights the multifaceted benefits that ECAs provide to learners, especially within developing educational contexts across Africa. These benefits, consequently, span academic, socio-emotional, physical, and behavioral domains, contributing to the overall development of well-rounded students. Firstly, one of the most widely recognized benefits of ECAs is their positive contribution to academic performance. Specifically, research suggests that students who participate in structured extracurricular programs often demonstrate improved study habits, higher classroom engagement, and stronger academic motivation (Craft, S. W., 2012). In addition, these programs help learners develop time management skills, discipline, and a sense of responsibility, which collectively support better academic outcomes. For example, participation in academic clubs, debate teams, and reading groups has been linked to enhanced problem-solving and critical-thinking abilities. Furthermore, ECAs play a crucial role in fostering social and emotional development. Activities such as sports, cultural clubs, and leadership groups create environments where students learn teamwork, communication, conflict resolution, and self-regulation (Metsäpelto & Pulkkinen, 2014). Consequently, these competencies contribute to improved self-esteem and emotional resilience, which are essential for young people navigating social and academic challenges. In particular, the collaborative nature of ECAs helps students build meaningful peer relationships and develop a sense of belonging within the school community. Additionally, extracurricular involvement has been shown to promote physical health and wellbeing, particularly through sports and recreational activities. Research indicates that regular participation in physical ECAs

improves cardiovascular fitness, motor skills, and overall physical activity levels (Zwart, M., 2007). These health benefits, therefore, are especially important in contexts where students may have limited access to safe recreational spaces outside of school.

Another significant benefit relates to behavioral outcomes. Studies indicate that students who participate in ECAs are less likely to engage in risky behaviors such as truancy, substance abuse, or violence (Darling, N., 2005). This is because structured programs foster positive behavior patterns by providing safe, supervised environments that encourage constructive use of free time. Moreover, mentorship from teachers and coaches also reinforces discipline and prosocial conduct. Finally, beyond individual benefits, ECAs strengthen school culture and promote broader educational goals. For instance, schools that actively integrate extracurricular programs tend to cultivate more inclusive, vibrant learning environments that support student retention and engagement.

In African settings, where many students face socio-economic challenges, ECAs serve as protective factors that enhance learners' confidence, aspirations, and sense of purpose (Thelma et al., 2024).

2.2 Types of Extracurricular Activities in Schools

Extracurricular activities (ECAs) encompass a broad range of structured programs designed to support students' development beyond the formal curriculum. Scholars categorize ECAs into multiple domains, including educational, athletic, cultural, artistic, leadership, and service-oriented activities (Marsh, & Kleitman, 2002). However, two of the most dominant and widely researched categories—particularly within African school systems—are education-based and sport-based activities. These categories form the foundation of many schools' extracurricular programs due to their direct contribution to academic enhancement and physical development.

2.2.1 Education-Based Extracurricular Activities

Education-based ECAs refer to structured academic or intellectual programs that complement classroom learning. Common examples include debate clubs, science clubs, reading and writing clubs, mathematics societies, language clubs, robotics teams, academic competitions, and school-based research groups. Literature suggests that these activities play a critical role in strengthening students' cognitive skills, academic motivation, and problem-solving abilities (Feldman, et al 2005). They provide students with opportunities to explore academic interests more deeply, practice critical thinking, and apply classroom knowledge in real-world or competitive contexts.

In African settings, education-based ECAs are particularly valued for their role in enhancing literacy, numeracy, and higher-order thinking skills among learners who may have limited learning resources at home (De Wet, et al 2018). Participation in literacy clubs, spelling contests, or science fairs can significantly strengthen students' reading comprehension, creativity, and research skills. Additionally, these activities often promote collaborative learning environments where students share ideas, mentor peers, and develop communication competencies essential for academic progression.

2.2.2 Sport-Based Extracurricular Activities

Sport-based ECAs include school sports teams, athletics, football, volleyball, basketball, netball, handball, gymnastics, martial arts, and recreational games. These activities emphasize physical development, teamwork, discipline, and resilience. Research highlights that participation in sports significantly contributes to learners' physical fitness, motor coordination, and healthy lifestyles (Muñoz-Bullón et al, 2017). Sport-based ECAs are also linked to improved psychological wellbeing, stress reduction, and enhanced school belonging. In many African schools, sports activities serve as major platforms for talent identification and social engagement, particularly for students who may not excel academically. Participation promotes values such as leadership, cooperation, and fair play, while also helping learners develop time management and emotional regulation skills. Studies further emphasize that regular involvement in school sports reduces behavioral problems and improves classroom engagement, especially among adolescents (Billonid et al, 2020).

2.2.3 Other types of Extracurricular Activities

In addition to education-based and sport-based extracurricular activities, schools typically offer a wide range of other programs that contribute to students' holistic development. Cultural and arts activities, such as drama, music, dance, fine arts, and photography clubs, help nurture learners' creativity, cultural appreciation, and expressive skills (Van Zyl, P. W. (2021)). Schools also provide leadership and governance activities, including student councils, prefect bodies, and peer

mentorship programs, which cultivate leadership competencies, responsibility, and participatory decision-making among learners (Lujoo, & Wandela 2024).). Another important category includes social and service-oriented activities, such as environmental clubs, community service groups, and First Aid or Red Crescent societies, which encourage civic engagement, empathy, and community responsibility (Thelma et al , 2024). Many schools further incorporate technical and vocational activities, including ICT clubs, entrepreneurship clubs, and hands-on skills programs like carpentry or mechanics, offering students practical knowledge and exposure to career pathways (Bonaventure, 2020). Additionally, religious and moral development groups, such as Islamic clubs, Christian unions, and ethics clubs, provide platforms for moral instruction, spiritual growth, and character development (Van Zyl, P. W. (2021).). Together, these categories reflect the diversity of school-based ECAs and demonstrate their role in promoting comprehensive personal, social, and ethical development among learners.

2.3 Factors Influencing Students' Participation in Extra-Curricular Activities

2.3.1 Funding

The availability and unavailability of financial resources are pivotal in shaping student participation in co-curricular activities. Kisango (2016) identifies adequate funding as a critical enabler, allowing schools to procure necessary equipment, offer training for activity coordinators, subsidize participation costs for students, and organize competitions. In this context, funding facilitates access and enhances program quality. Conversely, the literature consistently highlights that the unavailability of sufficient funding is a primary barrier. Financial constraints often force schools to prioritize core academic expenditures, leaving co-curricular programs under-resourced or entirely unfunded. This scarcity can lead to the cancellation of activities, reliance on outdated or insufficient materials, and the inability to support students from low-income backgrounds with associated costs like uniforms or travel, thereby creating inequitable participation (Kisango, 2016).

2.3.2 Infrastructural Facilities

The presence of appropriate infrastructural facilities is a significant determinant of co-curricular engagement. Murungi & Njagi (2024) notes that the availability of dedicated and well-maintained spaces—such as sports fields, science labs for clubs, musical instruments, and art rooms—directly enables a diverse range of activities. Such facilities provide the necessary physical environment for effective program implementation. On the other hand, the unavailability or poor condition of these facilities poses a major constraint. Many public secondary schools, particularly in rural or underfunded areas, lack basic infrastructure. The absence of a playing field, a hall for drama, or functional laboratory equipment effectively prohibits the establishment of corresponding activities, severely limiting the scope of co-curricular offerings and student choice (Murungi & Njagi, 2024).

2.3.3 Teachers' Role

The role of teachers as facilitators and mentors is central to the success of co-curricular programs. (Muema, A. K. (2019) emphasizes that the availability of trained, motivated, and adequately compensated teachers to serve as club patrons, sports coaches, or activity coordinators is a key enabling factor. These teachers provide essential guidance, skill development, and sustained supervision. However, the unavailability of such committed staff is a widespread challenge. Teachers often face high workloads from academic responsibilities, lack specific training in co-curricular domains, and may receive no additional remuneration or recognition for this extra duty. This can lead to a lack of volunteers, poor program management, and low activity morale, ultimately discouraging student participation ((Muema, A. K. 2019).

2.3.4 Parental Involvement

Parental attitudes and engagement significantly influence student participation. Kumar, & Arockiasamy (2012). points out that the availability of supportive parental involvement—characterized by encouragement, attendance at events, and understanding of the holistic benefits of co-curricular activities—serves as a strong motivator for students. Such support reinforces the value of participation. In contrast, the unavailability of parental support, or active discouragement, is a notable barrier. Some parents may perceive these activities as a distraction from academic work, a financial burden, or may be unable to engage due to socioeconomic pressures. This lack of support at home can lead to student reluctance to join activities or pressure to withdraw, particularly when academic performance is a primary familial concern (Kumar, & Arockiasamy 2012).

2.4 Effect of Extracurricular Activities on Academic Performance

2.4.1 Education-Based Co-curricular Activities and Academic Performance

Education-based co-curricular activities refer to structured engagements that are academically aligned, including but not limited to debates, symposiums, environmental clubs, science congresses, and subject-specific competitions integrated within the broader curriculum. Research has investigated the correlation between such activities and academic outcomes. For instance, a study by Ritchie (2018) examined the impact of academic co-curricular involvement on the performance of high school students in the United States. The research focused on the quantity of activities in which students participated and its relationship to their Grade Point Average (GPA), employing both descriptive and inferential statistical analyses. The findings indicated a positive association, concluding that participation in academically oriented co-curricular activities contributed to an increase in students' GPAs.

In a different context, Ayesha et al. (2024) explored the role of co-curricular activities in educational performance and character development from the perspective of teachers in Shakargarh. Their study categorized activities into physical and non-physical domains. Utilizing a questionnaire as the primary data collection instrument, the researchers gathered responses from a randomly selected sample of 120 participants across eight schools. Data analysis was conducted using the Statistical Package for the Social Sciences (SPSS).

Results identified non-physical activities—such as reading, Naats, and debates—and physical activities—including cricket, handball, and football—as the most prominent in their respective categories. The study concluded that co-curricular engagement plays a significant role in character formation, promotes physical health, and exerts a positive influence on students' academic learning. Building upon such categorizations, the current study examines the specific influence of these activity types on academic performance within the context of Kapenguria, West Pokot County.

In an exploratory study, Muhammad et al. (2022) investigated the impact of co-curricular activities on the academic achievement of secondary school students in District Quetta, with a specific focus on gender differences in participation and interest. Utilizing Pearson correlation analysis to assess the relationship between co-curricular involvement and academic performance, the researchers sampled 386 tenth-grade students (191 boys, 195 girls) from ten different secondary schools. Findings indicated that male students demonstrated higher levels of participation in co-curricular activities at the secondary level. The correlation analysis further revealed a statistically positive association between co-curricular engagement and academic improvement.

Similarly, Romica and Philip (2020) examined the effects of extra- and co-curricular activities on the academic performance of intermediate-level pupils in Binmaley, Pangasinan. Their descriptive study sought to profile participating schools and pupils based on institutional type, learner and teacher populations, organizational structures, and student participation rates. Additionally, it assessed the perceived contribution of such activities—including scouting, journalism, math and science programs, leadership development, athletic meets, and arts competitions—toward attaining targeted learning competencies. The research also evaluated challenges faced by pupils in participating, as perceived by teachers, and analyzed the relationship between the extent of these activities' contribution to learning outcomes and various school profile variables. Employing purposive sampling and a researcher-administered questionnaire, the study concluded a significant relationship between the contribution of co-curricular activities to learning competencies and school profile characteristics. It further affirmed that pupil participation in such activities meaningfully supports the attainment of learning competencies. In alignment with this scholarly focus, the present research concentrates specifically on the influence of education-based and sport-based co-curricular activities on the academic performance of students in public secondary schools.

Fredricks and Eccles (2016) conducted a longitudinal investigation into the impact of co-curricular activities using a large-scale sample of students in the United States. The research methodology incorporated interviews and self-administered questionnaires, engaging both students and their parents. Findings demonstrated that participation in high school clubs predicted positive long-term outcomes, including academic adjustment, educational attainment, and civic engagement in adulthood. Notably, the strength of the relationship between activity participation and developmental outcomes varied based on the type of activity, the specific outcome measured, and the developmental stage at which it was assessed.

In a related study, Champoux (2016) analyzed the influence of student engagement in education-based co-curricular activities on academic achievement. The research focused on 18 students from a liberal arts institution in New York. Using

a comparative design, the study analyzed changes in grade point averages (GPA) from periods of low involvement in such activities to periods of high involvement. Data were collected via a questionnaire featuring both Likert-scale and open-ended items. The results indicated that increased participation in education-based co-curricular activities corresponded with measurable improvements in academic performance. Additionally, the research found that such involvement enhanced students' sense of connection to their university

Shamsudin et al. (2014) investigated the influence of physical, educational, and social co-curricular activities on student academic performance in Malaysia. Employing a cross-sectional, quantitative research design, data were collected from 150 students across selected public universities. Contrary to other studies, their findings revealed no statistically significant connection between participation in these activities and academic achievement. Specifically, the analysis indicated no positive relationship between engagement in educational, physical, or social co-curricular activities and students' academic outcomes. The researchers suggested that the design and implementation of these activities may not have been sufficiently aligned to confer academic benefits. The present study seeks to build upon this line of inquiry by shifting the focus to secondary school learners and specifically examining education-based co-curricular activities.

In a contrasting study, Rathore et al. (2018) explored this relationship within the context of Lahore. The researchers sampled 636 secondary and higher secondary students from thirty schools and colleges, analyzing data on their 10th and 12th-grade examination results and class attendance. Using multiple regression analysis, the study uncovered a positive relationship between participation in co-curricular activities and academic performance. The findings further indicated that the participatory group demonstrated academic enhancement in terms of class division and attendance. Specifically, students involved in co-curricular activities exhibited more consistent class attendance, which the researchers argued contributed to their improved academic outcomes.

Concluding this review, Adeyemo (2010) conducted a focused investigation into the relationship between student participation in education-based co-curricular activities and their academic performance in Physics. The study utilized a sample of two hundred senior secondary school students from Lagos State, Nigeria. Data were collected through a structured questionnaire and a Physics Achievement Test (PAT). Employing regression analysis, the findings demonstrated that involvement in education-based co-curricular activities had a statistically significant positive influence on students' achievement in Physics. While this study provides valuable subject-specific insights, the present research aims to broaden the scope by examining the impact of such activities on learners' overall academic performance, rather than focusing on a single subject area.

2.4.2 Sport-Based Co-Curricular Activities and Academic Performance

Sport-based co-curricular activities, which include structured physical pursuits such as athletics and football, serve as complementary and enriching extensions to the formal academic curriculum. Empirical research has frequently indicated a positive association between engagement in sports and scholastic outcomes. However, this relationship may reflect correlation rather than direct causation; while participation does not intrinsically ensure high examination scores, it is plausible that academically proficient students may also be more inclined toward such activities (Daniyal et al., 2012). Supporting the broader positive trend, Reeves (2008) found that students engaged in three to four co-curricular activities during an academic year achieved significantly higher grades compared to their non-participating peers.

A study by Ashfaq (2021) examined the role of sports and co-curricular activities (CCA) on academic achievement among secondary school students in the newly merged districts of Khyber Pakhtunkhwa Province, formerly known as the Federally Administered Tribal Areas (FATA) of Pakistan. Utilizing a sample of 200 students selected from ten high schools in the Frontier Region Kohat, the research employed a five-point Likert scale questionnaire, administered with institutional authorization. Data analysis, conducted using arithmetic measures (Mean, Percentage, and Standard Deviation), revealed a positive link between participation in sports and co-curricular activities and enhanced educational performance, specifically in raising grade point averages (GPA). The findings also indicated that such involvement fosters improved student self-management, confidence, composure, and self-esteem. Ultimately, the study concluded that participation in sports and co-curricular activities exerts a significant and positive influence on student academic achievement and related competencies.

Furthermore, Ashfaq (2021) also examined the challenges impeding student participation in sports. The study identified several institutional and perceptual barriers, including constrained school budgets, a lack of interest from heads of institutions, the perception among many teachers and parents that these activities are a waste of time, inadequate facilities,

insufficient security for participants, and a lack of access to balanced nutrition necessary for student-athletes. While these factors present significant obstacles, the current research does not focus on them directly. Instead, it is specifically concerned with examining how learner participation in co-curricular activities influences academic performance within the context of Kapenguria Sub-County, West Pokot County.

In a contrasting finding from Northern Ireland, Mullen (2016) investigated the association between involvement in co-curricular activities and student academic achievement. Using a questionnaire to gauge the level and types of student participation, and standardized test scores as a measure of academic performance, the study revealed a negative relationship between engagement in co-curricular physical activities and academic achievement. The author, however, noted the provisional nature of this finding and recommended further research to validate and contextualize these results.

Conversely, a study by Qurban et al. (2018) in Pakistan explored the relationship between sports participation and academic performance. Utilizing questionnaires to collect data on student engagement and academic outcomes, and applying structural equation modeling for analysis, the results found no direct relationship between sports involvement and academic performance. A key distinction from the present study is that Qurban et al. (2018) focused on university students in Pakistan, whereas the current research is situated within the secondary school context of Kapenguria Sub-County, West Pokot County.

In a related Pakistani study, Rathore et al. (2018) examined the relationship between co-curricular activities and examination performance, with specific reference to the mediating role of class attendance. Analyzing secondary data—including participation records, 10th-grade attendance, and board exam grades—from 636 students across thirty high schools in Lahore via multistage purposive sampling, the researchers employed multiple regression analysis. The results demonstrated a positive impact of co-curricular activities on exam performance. Further analysis using the Sobel test indicated that attendance partially mediated this relationship. The study established that participation in co-curricular activities improves student attendance, which in turn contributes significantly to achieving higher exam grades, concluding that involved students outperformed their non-participating peers.

In a subject-specific investigation, Itankan and Akke (2019) examined the nexus between sports participation and academic achievement in Mathematics among senior secondary school students in Nigeria. Employing a simple survey design, the study utilized a Mathematics sports-related scale—comprising 10 validated and reliable items—administered to 590 students across eighteen senior secondary schools in Nigeria's North-East zone. Data analysis, conducted using the Spearman rank correlation method, revealed a strong positive relationship between student participation in sports and their academic achievement in Mathematics. Unlike this subject-specific focus, the present study emphasizes the influence of co-curricular participation on the overall academic performance of learners within public secondary schools in Kapenguria Sub-County, West Pokot County.

In a Ugandan context, Bagaya and Sekabembe (2011) investigated the relationship between student participation in sports and its influence on academic performance. The study employed a self-administered questionnaire for data collection. The gathered data were analyzed using descriptive statistics (percentages and means). To test the study's guiding hypotheses, Spearman's correlation coefficient was applied. The results indicated a statistically significant negative relationship between students' involvement in sports and their academic performance.

In the Kenyan context, Kiptala and Okero (2014) examined the relationship between student involvement in co-curricular activities and academic performance within secondary schools, guided by Kurt Lewin's perception theory. Employing an ex-post-facto research design, the study focused on students participating in volleyball and football.

Data were collected via questionnaire and analyzed using descriptive statistics (frequencies, percentages, means, standard deviations) and inferential statistics (Pearson correlation and ANOVA). The results indicated that 59.7% of participating students exhibited poor academic performance. While football participants academically outperformed volleyball participants, the study concluded there was no significant overall relationship between co-curricular involvement and educational achievement. The current research seeks to ascertain whether a similar pattern exists among secondary school students in Kapenguria Sub-County, West Pokot County.

Agnes et al. (2020) investigated the influence of participation in competitive co-curricular activities (sports, music, and drama) on self-concept among secondary school students in Kenya's Central Region. Adopting an ex-post facto design, data were collected using a self-concept inventory questionnaire and school records from 1,408 participants in regional

championships. Analysis via independent t-tests and two-way ANOVA revealed that participants scored significantly higher in self-concept than non-participants, indicating a positive influence of co-curricular involvement across variables such as gender, school type, class, and parental economic status. Drama participants demonstrated the highest self-concept, followed by sports and music. While Agnes et al. focused on self-concept development, the present study similarly categorizes co-curricular activities but examines their influence specifically on academic performance in Kapenguria, West Pokot County.

Kapelinyang and Lumumba (2017) explored the relationship between student participation in co-curricular activities and educational attainment using a concurrent mixed-methods approach. A sample of 250 students, 15 co-curricular teachers, and 5 principals was selected via simple and stratified random sampling. Quantitative data were analyzed using descriptive statistics, qualitative data through thematic analysis, and regression analysis was applied to determine the significance of the relationship. Findings indicated that participation in athletics, music, and soccer positively influenced learners' academic performance. This study aims to establish whether the same relationship holds true among learners in public secondary schools within Kapenguria Sub-County, West Pokot County.

3. CHALLENGES AND CRITICISMS OF SCHOOL EXTRACURRICULAR ACTIVITIES

Although extracurricular activities (ECAs) are widely recognized as valuable components of holistic education, literature also highlights a range of challenges and criticisms associated with their implementation, particularly within African school systems. These challenges often stem from structural limitations, socio-economic constraints, administrative weaknesses, and inequalities embedded in the broader education environment. One of the most frequently cited challenges in the literature is inadequate funding and resource limitations. Schools in many African countries operate under constrained budgets, with priority given to core academic needs rather than extracurricular programming. As a result, ECAs often lack appropriate facilities, equipment, and qualified supervisors, which reduces their overall effectiveness (Wardhani, et al 2020). Limited resourcing leads to poorly structured or inconsistent programs that fail to meet learners' developmental needs.

Another major criticism centers on unequal access and participation. Students from wealthier families or urban schools predominantly benefit from ECAs because they can afford participation fees, transport, or specialized materials. Conversely, learners from rural or low-income households face barriers that restrict their involvement (Snellman et al 2015). This unequal access reinforces existing educational disparities and undermines the inclusive potential of extracurricular programming. The literature also identifies academic time displacement as a critical concern. Critics argue that time spent on sports, clubs, and cultural activities may compete with academic responsibilities, potentially lowering academic focus or encouraging absenteeism (Chirimbu, S., & Petrescu, 2025). While some evidence supports positive academic effects of ECAs, other studies warn that without clear guidelines and supervision, participation may negatively affect students' study time, especially for high-stakes exam classes.

Moreover, insufficient professional supervision and training present another significant challenge. Many schools rely on teachers who already carry heavy academic workloads and lack specialized training in coaching, mentorship, or activity management (Kelbiso, B. (2019)). This can compromise program quality, expose students to safety risks, and decrease the educational value of ECAs. Poor supervision has also been linked to disciplinary issues and unstructured activity time. Additionally, some scholars highlight institutional and cultural resistance as a barrier to successful ECA implementation. In settings where academic achievement is culturally prioritized over holistic development, parents and teachers may perceive extracurricular activities as unnecessary or distracting. This perception discourages student participation and contributes to underinvestment in school programs (Abizada et.al 2020). Finally, challenges related to monitoring and evaluation undermine the sustainability of ECA initiatives. Few schools have systems for documenting student progress, tracking attendance, or assessing program outcomes. The lack of evidence-based evaluation makes it difficult to justify funding or improve program design over time (Clement & Mwila, 2023).

4. BEST PRACTICES FOR IMPLEMENTING EXTRACURRICULAR ACTIVITIES

The effective implementation of extracurricular activities (ECAs) has been widely recognized as a key component in promoting holistic student development, particularly in low-resource educational contexts across Africa. Literature suggests that well-structured ECAs enhance learners' social, emotional, and academic growth by providing opportunities for experiential learning, leadership development, and socio-cultural engagement (Ribeiro, 2024).). However, the success of such programs depends largely on how they are planned, supervised, and integrated into the broader school ecosystem. A

recurring best practice highlighted across studies is the alignment of ECAs with educational objectives. Schools that integrate extracurricular programs into their institutional mission tend to record improved student participation and better academic outcomes (Anjum, S. (2021). This alignment ensures that ECAs are not treated as optional add-ons but as strategic tools for enhancing competencies such as critical thinking, teamwork, and self-discipline.

Another best practice involves adequate planning and resource allocation. Effective ECA programs require trained facilitators, appropriate spaces, and adequate materials. Research conducted in West African secondary schools shows that where schools allocate clear budgets, assign dedicated staff, and create structured activity schedules, learners exhibit higher engagement and sustained interest (Tadesse, 2019). In contrast, lack of resources often leads to irregular programming and weak student motivation.

The literature also emphasizes the importance of inclusive participation. Ensuring that extracurricular programs accommodate diverse learners—regardless of gender, socio-economic status, or academic ability—has been associated with improved equity outcomes (Lyoba, S. M., & Mwila, P. M. (2022)). Inclusive ECAs broaden access to personal development opportunities and help reduce marginalization, especially for students from disadvantaged backgrounds. Moreover, consistent monitoring and evaluation of extracurricular programs is highlighted as a key best practice. Schools that track student attendance, progress, and skill development are better equipped to refine their programs and ensure sustained effectiveness. Continuous feedback from teachers, students, and community partners enables schools to adjust activities to meet evolving learner needs (Rotich Et.al 2025). Finally, several scholars argue that community and parental involvement significantly enhance ECA implementation. Collaborative partnerships with local organizations, sports clubs, youth groups, and cultural institutions strengthen program relevance and provide additional resources and mentorship opportunities (Hasan, & Dehham,2022)). Parental encouragement further boosts student participation and persistence in extracurricular engagement.

REFERENCES

- [1] Abizada, A., Gurbanova, U., Iskandarova, A., & Nadirzada, N. (2020). The effect of extracurricular activities on academic performance in secondary school: The case of Azerbaijan. *International Review of Education*, 66(4), 487-507.
- [2] Acquah, B. Y., & Anti Partey, P. (2014). The influence of co-curricular activities on students' performance in economics. *Journal of Educational Management*, 6, 147–160.
- [3] Adeyemo, S. A. (2010). The relationship between students participation in school-based extra-curricular activities and their achievement in physics. *International Journal of Science and Technology Education Research*, 1(6), 111-117.
- [4] Agnes Wanjiku Kamau, et al. (2020). Influence of Participation in Competitive Co-Curricular Activities on Self-Concept of Secondary School Students in Kenya. *International Journal of Sports Science*, 10(5).
- [5] Anjum, S. (2021). Impact of extracurricular activities on academic performance of students at secondary level. *International Journal of Applied Guidance and Counseling*, 2(2), 7-14)
- [6] Ashfaq, M. (2021). Function of sports and co-curricular activities on academic achievement in secondary schools students in ex-Fata Pakistan. *Edu Sportivo: Indonesian Journal of Physical Education*, 2(2), 92-100.
- [7] Bagaya, J., & Sekabembe, B. (2011). Influence of involvement in sports on students' involvement in academic activities at Ndejje University. *Makerere Journal of Higher Education*, 3(2).
- [8] Bartlett, J., Kotlik, J., Higgins, C., & Williams, H. J. P. R. (2001). Exploring factors associated with research productivity of business faculty at the National Association of Business Teacher Education. Published Report.
- [9] Bekomson, A. N., Amalu, M. N., Mgbani, A. N., & Kinsley, A. B. (2020). Interest in extra-curricular activities and self-efficacy of senior secondary school students in Cross River State, Nigeria. *International Education Studies*, 13(8), 79-87.
- [10] Billonid, J., Cabailo, M. T., Dagle, W. R. M., Godilano, D. M., Kibanoff, K. R., & Tasic, L. R. (2020). Effects of sports participation on the academic performance of grade 12 students after the K-12 implementation. *Education*, 10(2), 41-47.

- [11] Bonaventure, N., & Claire, M. M. (2020). Influence of Extracurricular Activities on Students Discipline in Twelve Years Basic Education in Rwanda. *Journal of education*, 3(4), 37-47.
- [12] Bundick, M. J. (2011). Extracurricular activities, positive youth development, and the role of meaningfulness of engagement. *The Journal of Positive Psychology*, 6(1), 57-74.
- [13] Champoux, K. (2016). Do extracurricular activities promote better academic performance and heightened sense of school connectedness in college athletes (Doctoral dissertation). State University of New York College at Fredonia.
- [14] Chirimbu, s., & petrescu, M. (2025). Extracurricular Activities in Romania: Challenges and Limitations in the Context of Contemporary Schools. Volume VI, 49.
- [15] Christison, C. (2013). The benefits of participating in extracurricular activities. *BU Journal of Graduate Studies in Education*, 5(2), 17-20.
- [16] Clement, J., & Mwila, P. M. (2023). Extracurricular Activities: Prospects and Challenges among Female Students in Secondary Schools in Chanika Ward, Tanzania. *International Journal of Social Science, Management and Economics Research*, 1(1), 14-30.
- [17] Cooper, D. R., & Schindler, P. S. (2008). *Business research methods (International edition)*. New Delhi: MacGraw-Hill.
- [18] Cooper, D. R., & Schindler, P. S. (2014). *Business research methods*. The McGraw-Hill Companies.
- [19] Coto, L. (2016). Extracurricular activities and substance use among adolescents: A test of social control and social learning theory.
- [20] Craft, S. W. (2012). The impact of extracurricular activities on student achievement at the high school level. The University of Southern Mississippi.
- [21] Daniyal, M., Nawaz, T., Hassan, A., & Mubeen, I. (2012). The effect of co-curricular activities on the academic performances of the students: A case study of the Islamia University of Bahawalpur, Pakistan. *Bulgarian Journal of Science & Education Policy*, 6(2).
- [22] Darling, N. (2005). Participation in extracurricular activities and adolescent adjustment: Cross-sectional and longitudinal findings. *Journal of youth and adolescence*, 34(5), 493-505.
- [23] De Wet, N., Muloiwa, T., & Odimegwu, C. (2018). Extra-curricular activities and youth risky behaviours in South Africa. *International Journal of Adolescence and Youth*, 23(4), 431-440.
- [24] Dearman, S. G. (2017). School sanctioned extra-curricular activities and academic achievement: A quantitative study of hours of extra-curricular participation and the impact upon GPA and ACT score (Unpublished doctoral dissertation). ProQuest LLC.
- [25] Duerden, M. D., & Witt, P. A. (2010). An ecological systems theory perspective on youth programming. *Journal of Park & Recreation Administration*, 28(2).
- [26] Entwistle, N. J. (1972). Personality and academic attainment. *British Journal of Educational Psychology*, 42(2), 137-151.
- [27] Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of educational research*, 75(2), 159-210.
- [28] Forneris, T., Camiré, M., & Williamson, R. (2015). Extracurricular activity participation and the acquisition of developmental assets: Differences between involved and noninvolved Canadian high school students. *Applied Developmental Science*, 19(1), 47-55.
- [29] Fredricks, J. A., & Eccles, J. S. (2016). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4), 698.

- [30] Fujita, K. (2016). The effects of extracurricular activities on the academic performance of junior high students. *Undergraduate Research Journal for the Human Sciences*, 5(1), 1-16
- [31] Gilman, R., Meyers, J., & Perez, L. (2014). Structured extracurricular activities among adolescents: Findings and implications for school psychologists. *Psychology in the Schools*, 41(1), 31-41.
- [32] Granger, C. J. (2014). The influence of extra-curricular activities on student performance perceived by Texas rural high school principals with successful extra-curricular programs (Unpublished doctoral dissertation). Lamar University, Beaumont.
- [33] Hasan, A. H., & Dehham, S. H. (2022). Investigating EFL teachers' perspectives towards using extracurricular activities in developing secondary school students' performance in learning English language. *International Journal of Health Sciences*, (V), 1839-1850.
- [34] Ibiam, N., & Enendu, M. O. (2015). Extra-curricular activities and their influence on academic performance of students in Michael Okpara University of Agriculture, Umudike. *Journal of Sustainable Development in Education (JSDE)*, 1(1), 103–116.
- [35] Itankan, W. A., & Bakke, M. M. (2019). The analysis of relationship between co-curricular activities (sport) and students' achievements in senior secondary school mathematics in southern part of Taraba State, Nigeria.
- [36] Kapelinyang, R. P., & Lumumba, K. P. (2017). Determinants of academic performance in public secondary schools in Kapenguria division-Kenya: Assessing the effect of participation in selected co-curricular activities. *African Journal of Education, Science and Technology*, 4(2), 164-174.
- [37] Kelbiso, B. (2019). Practice and challenges of implementing co-curricular activities: The case. *Environmental protection*, 14, 9-3.
- [38] Kiptala, I. N. K. W., & Okero, R. (2014). Students' co-curricular participation perception and academic performance in Kenyan secondary schools. *Journal of Educational Policy and Entrepreneurial Research*, 1(3), 31-39.
- [39] Kumar, G. N., & Arockiasamy, S. (2012). Parental Influence on Psychological Value Perception of Co-Curricular Activities: Its Links with Improving Personality Traits of Higher Secondary Students. *Journal on Educational Psychology*, 6(1), 45-52.
- [40] Lujuo, A. P., & Wandela, E. L. (2024). Challenges in Implementing Extracurricular Activities and their Impact on Skill Development in Secondary Schools: A Case Study of Morogoro Municipality, Tanzania. *Asian Journal of Education and Social Studies*, 50(11), 219-227.
- [41] Lyoba, S. M., & Mwila, P. M. (2022). Effectiveness of Extracurricular Activities on Students' Learning Processes in Public Secondary Schools in Sikonge District, Tanzania. *Asian Journal of Education and Social Studies*, 28(2), 27-38.
- [42] Marsh, H., & Kleitman, S. (2002). Extracurricular school activities: The good, the bad, and the nonlinear. *Harvard educational review*, 72(4), 464-515.
- [43] Metsäpelto, R. L., & Pulkkinen, L. (2014). The benefits of extracurricular activities for socioemotional behavior and school achievement in middle childhood: An overview of the research. *Journal for educational research online*, 6(3), 10-33.
- [44] Moore, S. D. (2016). A qualitative case study: A study on the relationship between soft skills and participation in co-curricular activities at two rural Kansas high schools (Unpublished doctoral dissertation). Southwestern College (Kansas).
- [45] Muema, A. K. (2019). Factors influencing teachers' involvement in co-curricular activities in public secondary schools in Matungulu sub-county, Machakos county, Kenya (Doctoral dissertation).
- [46] Mullen, M. (2016). An investigation into whether there exists a positive relationship between a child's level of extracurricular activity participation and their academic performance. *The STeP Journal*, 3(1), 92–110.

- [47] Mullen, M. (2016). An investigation into whether there exists a positive relationship between a child's level of extracurricular activity participation and their academic performance. *The STeP Journal*, 3(1), 92-110.
- [48] Muñoz-Bullón, Fernando, Maria J. Sanchez-Bueno, and Antonio Vos-Saz. "The influence of sports participation on academic performance among students in higher education." *Sport Management Review* 20.4 (2017): 365-378.
- [49] Murungi, J., & Njagi, M. (2024). Influence of school infrastructural resources on secondary school students' participation in co-curricular activities in laikipia west subcounty, laikipia county, kenya. *Journal of environmental sustainability advancement research*, 10.
- [50] Olson, C. A. (2015). Can music education help at-risk students? Study finds positive testimony substantial but quantitative research lacking. *Teaching Music*, 16(3), 20.
- [51] Qurban, H., Siddique, H., Wang, J., & Morris, T. (2018). The relation between sports participation and academic achievement: The mediating role of parental support and self-esteem. *Journal of Human Psychology*, 1(1), 27.
- [52] Rathore, K., Chaudhry, A. Q., & Azad, M. (2018). Relationship between CCA and exam performance: Mediating role of attendance. *Bulletin of Education and Research*, 40(1), 183-196.
- [53] Ribeiro, N., Malafaia, C., Neves, T., & Menezes, I. (2024). The impact of extracurricular activities on university students' academic success and employability. *European Journal of Higher Education*, 14(3), 389-409.
- [54] Rotich, L. C., Tsindoli, S., & Yungungu, A. M. (2025). Influence of Learners' Participation in Education and Sport Based Co-Curricular Activities on Academic Performance in Public Secondary Schools in Kenya. *J Adv Educ Philos*, 9(4), 167-185.
- [55] Snellman, K., Silva, J. M., & Putnam, R. D. (2015). Inequity outside the Classroom: Growing Class Differences in Participation in Extracurricular Activities. *Voices in urban education*, 40, 7-14.
- [56] Tan, D. L., & Pope, M. L. (2017). Participation in co-curricular activities: Nontraditional student perspectives. *College and University*, 83(1), 2.
- [57] Thelma, C. C., Phiri, E. V., Morgan, M., & Gilbert, M. M. (2024). The Effect of Co-Curricular Activities on Learners Academic Performance: A Case of Selected Secondary Schools in Lusaka District, Zambia.
- [58] Thelma, C. C., Phiri, E. V., Morgan, M., & Gilbert, M. M. (2024). The Effect of Co-Curricular Activities on Learners Academic Performance: A Case of Selected Secondary Schools in Lusaka District, Zambia.
- [59] Trowler, V. 2010 . Student engagement literature review. *The higher education academy*, 11(1), 1-15.
- [60] Van Zyl, P. W. (2021). The use of extracurricular activities in promoting the holistic development of learners in multicultural schools of the Free State province (Doctoral dissertation, Central University of Technology).
- [61] Wangai, M. M. (2012). Determinants of the development of students' talents in cocurricular activities in secondary schools in Mwatate district, Kenya (Doctoral dissertation). University of Nairobi, Kenya.
- [62] Wardhani, I. P., Chandra, N. E., & Febriyati, E. R. (2020). Students' Challenges In Performing Story Telling Extracurricular Activities. *Lingua Educatia*, 2(3), 181-195.
- [63] Zaman, F. (2017). Positive impact of extra-curricular activities on university students in Lahore, Pakistan. *International Journal of Social Sciences and Management*, 4(1), 22-31.
- [64] Zwart, M. (2007). An assessment of the perceived benefits of extracurricular activity on academic achievement at Paramount High School. *Academic Leadership: The Online Journal* (2003-2012), 5(1), 3.