

Level of Sports Participation and Academic Performance among Student-Athletes of Children First School, Inc.

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ABSTRACT

This study determined the level of sports participation and academic performance among student-athletes of Children First School, Inc. and examined whether the frequency, intensity, and duration of sports engagement were significantly related to their General Weighted Average (GWA). A descriptive-correlational research design was employed. Through total enumeration, 52 Grade 7 to Grade 12 student-athletes enrolled during School Year 2024–2025 participated in the study. Sports participation was measured using an adapted questionnaire covering frequency, intensity, and duration, while academic performance was obtained from official school records with the respondents' consent. Frequency, percentage, and mean were used for descriptive analysis, and Spearman's rank-order correlation was applied at the

0.05 level of significance. The largest group of respondents participated in sports three days per week (32.7%), indicating moderate frequency; engaged at a very hard intensity (32.7%), indicating very high intensity; and spent 60–90 minutes per session (34.6%), indicating moderate duration. Academic performance was Outstanding, with a mean GWA of 90.6; 69.2% of respondents were classified as Outstanding, 26.9% as Very Satisfactory, and 3.8% as Satisfactory. Sports participation was not significantly related to academic performance in terms of frequency ($p = .063$, $p = .657$), intensity ($p = .120$, $p = .399$), or duration ($p = .045$, $p = .751$). The findings indicate that the student-athletes maintained strong academic performance across differing patterns of sports engagement. Project MOVE (Mobilizing Opportunities for Vigorous Engagement) was therefore proposed to strengthen consistent, structured, and developmentally appropriate participation while preserving academic balance and learner well-being.

Keywords: *student-athletes, sports participation, academic performance, participation frequency, training intensity, Project MOVE*

INTRODUCTION

Physical education and school sports are important components of holistic education because they develop physical fitness, movement competence, discipline, cooperation, self-confidence, and social responsibility. Participation in organized sport also exposes learners to goal setting, team roles, competition, and sustained practice. Bailey (2019) described physical education and sport as educational contexts that support physical, psychological, and social development, while O'Donnell et al. (2020) emphasized the broader health and developmental value of purposeful participation in sport-related activities. In the Philippines, Republic Act No. 6847 institutionalized national leadership for amateur sports development through the Philippine Sports Commission and reinforced the importance of grassroots participation (LawPhil Project, 2024).

For student-athletes, however, sports participation occurs alongside academic obligations. Training, competitions, travel, and recovery require time and energy that must be managed together with attendance, coursework, assessments, and study. Gomez et al. (2018) characterized this situation as a dual-role challenge in which students pursue educational and athletic goals simultaneously. Sitkowski (2018) likewise noted that competing demands can create role strain when the time and energy required for sport overlap with academic responsibilities. These conditions make it necessary for schools, families, teachers, and coaches to coordinate support rather than treat athletic and academic participation as opposing commitments.

Research has produced mixed findings regarding the academic consequences of sports involvement. Several studies associate participation with stronger school engagement, higher grades, and supportive relationships (Lumpkin & Favor, 2022; Van Boekel et al., 2019). Rees and Sabia (2021) reported that academic benefits may increase with more frequent participation, while Montecalbo-Ignacio et al. (2017) found that sports participation was related to academic success among Filipino student-athletes. Other investigations, however, found no meaningful relationship or identified possible disadvantages when training becomes excessive or poorly coordinated (Jakiwa et al., 2022; Klein, 2015; Lang, 2018). The inconsistency suggests that the effects of sport may depend on context, participation patterns, institutional support, and the learner's ability to manage both roles.

Children First School, Inc. in Santiago City supports student-athletes who participate in swimming, taekwondo, badminton, gymnastics, basketball, volleyball, and billiards. Their involvement brings recognition to the school and promotes teamwork and community participation, but it also raises practical questions about missed classes, training schedules, academic preparation, fatigue, and time management. Understanding the actual frequency, intensity, and duration of their sports participation is therefore necessary to determine whether these dimensions are associated with their academic performance.

The study addressed a local evidence gap by examining all Grade 7 to Grade 12 student-athletes enrolled at Children First School, Inc. during School Year 2024–2025. Specifically, it determined their level of sports participation in terms of frequency, intensity, and duration; described their academic performance through GWA; tested the relationships between each participation dimension and academic performance; and developed an intervention plan based on the findings. The results were intended to guide school administrators, teachers, coaches, parents, and student-athletes in sustaining athletic engagement without compromising academic responsibilities.

Literature Review

Sports Participation: Frequency, Intensity, and Duration

Sports participation refers to purposeful involvement in structured or organized physical activities. O'Donnell et al. (2020) emphasized that participation provides physical, mental, and social benefits. In school settings, participation includes training, practice, competition, and related team activities. The present study operationalized participation through frequency, intensity, and duration because these dimensions describe how often student-athletes train, how demanding the activity is, and how long each session lasts.

Frequency reflects the number of participation sessions within a specified period, whereas intensity indicates the level of effort required during activity. Duration refers to the length of each session. These dimensions are interrelated but not interchangeable: a learner may train frequently at light intensity, participate less often at very high intensity, or complete long sessions only on selected days. Lin et al. (2023) used these dimensions to classify sport participation levels and showed that they provide a practical way to describe engagement patterns. Deck et al. (2021) similarly examined perceived frequency, intensity, and time of participation as meaningful features of athletes' experiences.

Empirical studies show considerable variation in the participation of young athletes. Aira et al. (2019) documented substantial weekly training volume among young athletes, although some did not consistently reach recommended moderate-to-vigorous activity levels. Murphy et al. (2020) also highlighted differences in adolescents' physical activity and sport participation. Varela-Sanz et al. (2024) found that training frequency and

session duration were associated with athletes' subjective vitality, suggesting that participation should be evaluated not only by whether students take part in sport, but also by the pattern and volume of their engagement.

Academic Performance and the Student-Athlete Role

Academic performance represents the extent to which learners achieve expected educational outcomes and is commonly reflected in grades or grade-point averages. Student-athletes are expected to meet these outcomes while fulfilling the demands of training and competition. Cross and Fouke (2019) described the scholar-athlete as a learner committed to both broad educational development and high-level athletic performance. This dual identity can promote discipline and time management, but it can also limit study time when schedules are not properly coordinated.

Studies frequently report that student-athletes perform as well as or better than non-athletes. Van Boekel et al. (2019) found that participation in school sports was associated with higher GPAs and more positive perceptions of support. Lumpkin and FAVOR (2022) likewise reported that high school athletes earned higher grades and experienced stronger school outcomes, while Eroa (2023) found that most student-athletes in a related study attained Outstanding GWA results. Such findings suggest that the routines, motivation, social support, and self-regulation developed through sport may reinforce academic behaviors.

Nevertheless, positive outcomes are not automatic. Denault et al. (2019) showed that the intensity of organized youth activities can influence adjustment, and Nguri (2024) explained that sports may support cognition, self-discipline, and time management while also producing fatigue, stress, and reduced study time when commitments become excessive. Haverkamp et al. (2022) concluded that physical activity interventions can influence cognitive and academic outcomes, but the effects vary across interventions and contexts. Schools therefore need to protect academic time, provide make-up support, and monitor workload rather than assume that participation is uniformly beneficial or harmful.

Relationship Between Sports Participation and Academic Performance

The literature presents positive, negative, and nonsignificant relationships between sport and academic achievement. Rees and Sabia (2021) associated more frequent sport participation with higher grades, and Montecalbo-Ignacio et al. (2017) reported a significant relationship between sports participation and academic success. Tomporowski et al. (2019) also discussed pathways through which exercise may support cognition and academic achievement, including attention, executive functioning, and psychological well-being. These explanations are consistent with the view that structured participation may reinforce behaviors useful in school.

Other studies found that participation did not significantly predict academic results. Jakiwa et al. (2022) reported no statistically significant difference in academic success across levels of sport participation, and Lang (2018) found no meaningful association between participation intensity or breadth and cumulative GPA. Klein (2015), in contrast, reported a negative correlation between school-sponsored athletic participation and academic performance. These divergent results indicate that the relationship may be shaped by study design, measurement, sample characteristics, sport type, academic support, and the balance between training and study demands.

The mixed evidence supports examining frequency, intensity, and duration separately rather than combining them into a single participation score. A student who trains three days per week for 60–90 minutes may experience a different academic situation from one who participates almost every day for more than two hours. The present study therefore tested the association of each participation dimension with GWA to generate context-specific evidence for Children First School, Inc.

Theoretical Foundations and Research Gap

The study was informed by Bandura's (1977) Self-Efficacy Theory. Self-efficacy refers to an individual's belief in the capability to organize and perform the actions needed to attain a goal. In sport, confidence can influence persistence, effort, coping, and performance; in academics, it can shape study behavior and resilience. Student-athletes who believe they can manage training and school requirements may be more likely to sustain effort in both

domains. Athletic mastery experiences, observation of successful peers, encouragement from coaches and teachers, and physiological feedback can further strengthen or weaken these beliefs.

Weiner's (1980) Attribution Theory also explains how learners interpret success and failure. Outcomes may be attributed to internal factors such as ability and effort or external factors such as task difficulty and luck. When students connect success to controllable effort and effective strategies, they may be more willing to persist and adjust their behavior. The framework is relevant to student-athletes because both sporting and academic outcomes require them to interpret feedback, regulate effort, and respond to setbacks.

Although previous studies examined sport participation and academic achievement, few focused on the complete population of secondary student-athletes within a single private-school context and assessed frequency, intensity, and duration as separate correlates of GWA. The study addressed this contextual and measurement gap. Its input-process-output framework treated the three participation dimensions as inputs, statistical assessment of participation and academic performance as the process, and Project MOVE as the output, with feedback supporting continuous improvement.

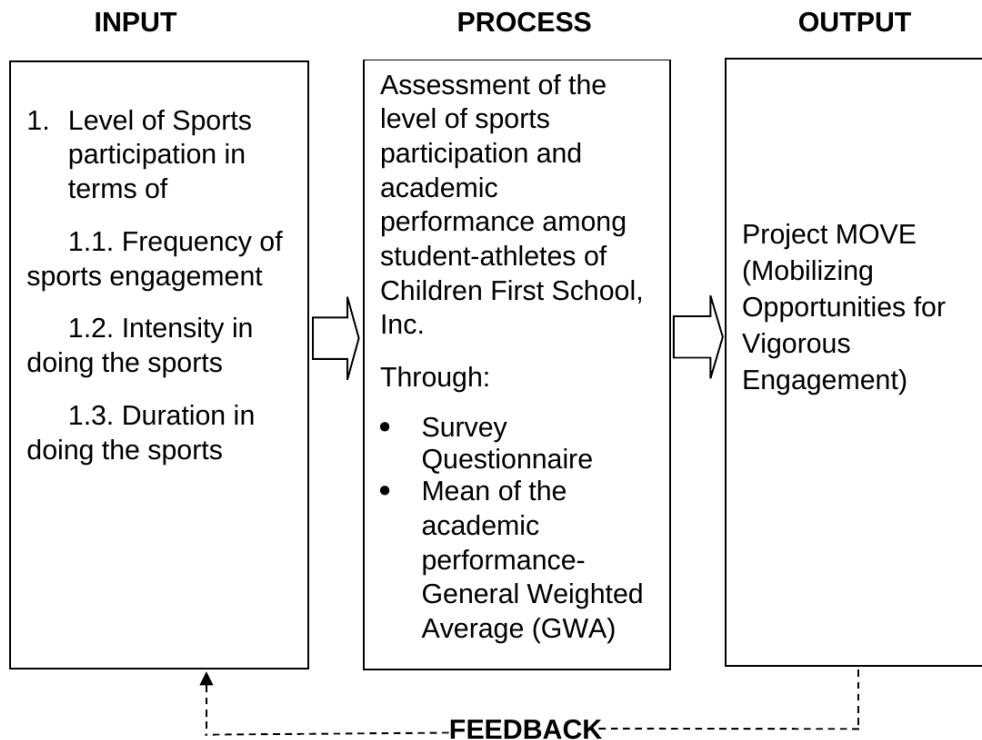


Figure 1. *Conceptual Framework of the Study*

METHODS

Research Design

The study employed a descriptive-correlational research design. The descriptive component was used to present the student-athletes' sports participation in terms of frequency, intensity, and duration and to describe their academic performance through GWA. The correlational component tested whether each dimension of sports participation was significantly associated with academic performance. This design was appropriate because the variables were observed as they naturally occurred without experimental manipulation (Siedlecki, 2020).

Research Locale

The study was conducted at Children First School, Inc., a private educational institution located along Patul Road, Rosario, Santiago City. The school offers basic education and supports student-athletes who represent the institution in different sports. Data collection covered School Year 2024–2025.

Participants and Sampling Technique

The participants were all 52 Grade 7 to Grade 12 student-athletes officially enrolled at the school during School Year 2024–2025. Total enumeration was used because the study intended to include the entire accessible population of student-athletes. The participants represented volleyball (17; 32.69%), basketball (11; 21.15%), badminton (9; 17.31%), swimming (5; 9.62%), taekwondo (4; 7.69%), gymnastics (4; 7.69%), and billiards (2; 3.85%).

Research Instrument

The research instrument consisted of two parts. Part I measured sports participation in terms of frequency, intensity, and duration and was adapted from the Sports Participation Questionnaire used by Lin et al. (2023). Frequency was rated from 1 (sometimes) to 5 (almost every day); intensity from 1 (very light) to 5 (very hard); and duration from 1 (less than 30 minutes) to 5 (more than 120 minutes). The response levels were interpreted as very low, low, moderate, high, and very high.

Part II recorded the respondents' academic performance using their official GWA. Academic performance was interpreted according to the grading categories used in the study: Outstanding (90–100), Very Satisfactory (85–89), Satisfactory (80–84), Fairly Satisfactory (75–79), and Did Not Meet Expectations (below 75).

Data Gathering Procedure

The researcher first requested permission from the appropriate school authorities to conduct the study and use the data-collection tools. After approval, the questionnaire was distributed to all identified student-athletes. The respondents completed the sports-participation items, and their GWA records were obtained from the school with the necessary institutional approval and the respondents' consent. Retrieved questionnaires were checked, tallied, coded, and prepared for statistical analysis.

Data Analysis

Frequency counts and percentages were computed to describe the distributions of sports-participation responses and academic-performance categories. The mean was used to summarize the respondents' GWA. Spearman's rank-order correlation coefficient was employed to test the relationships between the ordinal sports-participation dimensions and academic performance. The level of significance was set at 0.05. A p-value of .05 or lower indicated a significant relationship; a p-value greater than .05 indicated that the null hypothesis was not rejected.

Ethical Consideration

Institutional permission was secured before data collection. The participants were informed about the study and their right not to participate. The questionnaire allowed names to remain optional, and the collected information was treated confidentially. The researcher-maintained control of data entry and analysis and used the information only for the stated research purposes.

RESULTS AND DISCUSSION

Level of Sports Participation

Table 1. *Distribution of Student-Athletes by Frequency, Intensity, and Duration of Sports Participation*

Dimension	Response Category	f	%	Level
Frequency	Almost every day	14	26.9	Very High
Frequency	4–5 days/week	9	17.3	High
Frequency	3 days/week	17	32.7	Moderate
Frequency	1–2 days/week	7	13.5	Low
Frequency	Sometimes	5	9.6	Very Low
Intensity	Very hard	17	32.7	Very High
Intensity	Hard	15	28.8	High
Intensity	Moderate	15	28.8	Moderate
Intensity	Light	3	5.8	Low
Intensity	Very light	2	3.8	Very Low
Duration	More than 120 minutes	15	28.8	Very High
Duration	90–120 minutes	12	23.1	High
Duration	60–90 minutes	18	34.6	Moderate
Duration	30–60 minutes	5	9.6	Low
Duration	Less than 30 minutes	2	3.8	Very Low

Legend: Very High = 5; High = 4; Moderate = 3; Low = 2; Very Low = 1.

Table 1 shows that 17 respondents (32.7%) participated in sports three days per week, the largest frequency category, and this was interpreted as moderate. Fourteen (26.9%) participated almost every day, while nine (17.3%) participated four to five days per week. The remaining respondents participated one to two days per week (13.5%) or only sometimes (9.6%). The distribution indicates that most student-athletes participated regularly, although the consistency of participation varied across the group.

In terms of intensity, the largest group participated at a very hard level (17; 32.7%), followed by equal groups at hard and moderate intensity (15 each; 28.8%). Only five respondents reported light or very light participation. This pattern indicates that training was generally physically demanding. The result is consistent with Aira et al. (2019), who documented substantial moderate-to-vigorous activity among young athletes, and with Deck et al. (2021), who emphasized the importance of intensity in understanding athletes' participation experiences.

For duration, 18 respondents (34.6%) trained for 60–90 minutes per session, which represented the largest category and a moderate level. Fifteen (28.8%) reported more than 120 minutes, and 12 (23.1%) reported 90–120 minutes. Thus, most respondents spent at least one hour in each sports session. Varela-Sanz et al. (2024) similarly treated session duration as a meaningful component of training experience. The distribution suggests that school interventions should not simply increase time spent in sport; they should promote appropriate scheduling, progression, recovery, and balance with academic responsibilities.

Academic Performance of the Student-Athletes

Table 2. *Academic Performance of the Student-Athletes Based on General Weighted Average*

Academic Category	f	%	Mean GWA	Overall Interpretation
Outstanding	36	69.2	90.6	Outstanding
Very Satisfactory	14	26.9		

Academic Category	f	%	Mean GWA	Overall Interpretation
Satisfactory	2	3.8		
Total	52	100.0		

Academic scale: Outstanding = 90–100; Very Satisfactory = 85–89; Satisfactory = 80–84.

The respondents obtained a mean GWA of 90.6, interpreted as Outstanding. Thirty-six student-athletes (69.2%) were in the Outstanding category, 14 (26.9%) were Very Satisfactory, and two (3.8%) were Satisfactory. No respondent was reported in the Fairly Satisfactory or Did Not Meet Expectations categories. The findings demonstrate that the participants maintained strong academic standing while engaged in school sports.

This result agrees with Eroa (2023), who reported that most student-athletes in a related investigation attained Outstanding GWA, and with Lumpkin and Favor (2022), who found favorable academic outcomes among high school athletes. Van Boekel et al. (2019) likewise associated school-sport participation with higher GPAs and stronger perceptions of support. The result does not establish that sport caused high performance, but it indicates that the respondents were able to manage their academic responsibilities within the participation patterns observed. The strong GWA may reflect several supportive mechanisms described in the literature, including discipline, goal orientation, school engagement, and social support. From a self-efficacy perspective, repeated success in managing training and schoolwork may strengthen confidence in handling both roles (Bandura, 1977). At the same time, the school should continue monitoring attendance, workload, fatigue, and access to academic assistance because high group averages can conceal individual difficulties.

Relationship Between Sports Participation and Academic Performance

Table 3. *Spearman Correlations Between Sports Participation and Academic Performance*

Sports Participation Dimension	Spearman's ρ	p-value	Decision	Interpretation
Frequency of sports engagement	.063	.657	Do not reject H_0	Not significant
Intensity of sports participation	.120	.399	Do not reject H_0	Not significant
Duration of sports participation	.045	.751	Do not reject H_0	Not significant

Level of significance: $\alpha = .05$.

None of the sports-participation dimensions was significantly related to academic performance. Frequency had a very weak positive correlation with GWA ($\rho = .063$, $p = .657$), intensity also had a very weak positive correlation ($\rho = .120$, $p = .399$), and duration had a very weak positive correlation ($\rho = .045$, $p = .751$). Because all p-values exceeded .05, the null hypothesis was not rejected for each dimension.

The results indicate that differences in how often, how intensely, or how long the student-athletes participated in sport did not correspond to meaningful differences in their GWA within this sample. This finding is consistent with Jakiwa et al. (2022), who reported no statistically significant difference in academic success across levels of sport participation, and with Lang (2018), who found no significant association with cumulative GPA. It differs from studies reporting positive relationships (Montecalbo-Ignacio et al., 2017; Rees & Sabia, 2021) and from Klein (2015), who reported a negative relationship.

The absence of significant relationships should not be interpreted as evidence that sports have no educational value. The respondents already demonstrated generally regular participation and Outstanding academic performance, which may have reduced variability and limited the size of observable correlations. Academic outcomes may also depend on factors not measured in the study, such as prior achievement, motivation, family support, coaching practices, attendance, learning support, and time-management strategies. Nguri (2024) noted that sports can support discipline and cognitive functioning while also creating fatigue and time pressure, illustrating why effects may differ across individuals and settings.

Proposed Project MOVE

Project MOVE (Mobilizing Opportunities for Vigorous Engagement) was developed from the participation profile to promote more consistent, structured, and progressive sports engagement while sustaining appropriate intensity and duration. The project does not respond to poor academic performance, because the participants' mean GWA was Outstanding. Instead, it provides a school-based mechanism for maintaining regular activity, monitoring workload, encouraging safe progression, and reinforcing balance between athletics and academics.

Table 4. Condensed Implementation Plan for Project MOVE

Schedule	Core Activity	Frequency Target	Intensity Target	Duration Target
Week 1	Orientation and baseline assessment	1–2 sessions	Light	30 minutes
Weeks 2–3	Daily active breaks	Daily	Light–Moderate	10–15 minutes
Weeks 4–5	Structured sports sessions	3 times/week	Moderate	45–60 minutes
Week 6	Skills-enhancement drills	3–4 times/week	Moderate–Hard	60 minutes
Weeks 7–8	Mini-league competitions	3–4 times/week	Hard	60–90 minutes
Week 9	Fitness challenge	Daily	Moderate–Hard	30–60 minutes
Weeks 10–11	Recreational sports festival	4–5 times/week	Moderate	60–90 minutes
Week 12	Evaluation and recognition	2–3 sessions	Light	30–45 minutes

The proposed sequence begins with orientation and baseline assessment, develops routine through active breaks, progresses to structured sessions and skills drills, and culminates in competitions, recreational activities, and evaluation. Its gradual structure reflects the need to build consistency without imposing uniformly high workloads. Implementation requires coordination among administrators, teachers, coaches, parents, and students so that sports schedules remain compatible with classroom attendance, assessment deadlines, recovery, and academic support.

CONCLUSION

The student-athletes of Children First School, Inc. generally participated in sports on a regular basis. The largest group trained three days per week, at very hard intensity, and for 60–90 minutes per session. These findings indicate moderate modal frequency and duration together with very high modal intensity. Their academic performance was Outstanding, with a mean GWA of 90.6 and more than two-thirds of the respondents classified as Outstanding.

Frequency, intensity, and duration of sports participation were not significantly related to academic performance. Within the conditions of this study, variations in participation did not correspond to meaningful differences in GWA. The findings show that the respondents were capable of maintaining strong academic performance across different sports-engagement patterns, but they do not establish a causal effect of sports on achievement. Project MOVE offers a structured means of sustaining participation, monitoring appropriate training demands, and reinforcing balance between athletic and academic responsibilities.

Recommendation

Children First School, Inc. should implement Project MOVE as a coordinated school-based program that promotes consistent participation, safe progression, recovery, and academic balance. Administrators should align

training and competition schedules with major academic requirements and provide opportunities for make-up work or academic assistance when student-athletes miss classes because of official events.

Teachers, coaches, and parents should maintain regular communication regarding attendance, academic deadlines, fatigue, training load, and learner well-being. Coaches should monitor intensity and session duration and avoid unnecessary overload, while teachers should provide clear academic expectations and reasonable support for officially excused absences. Student-athletes should strengthen time management, study routines, sleep, recovery, and self-monitoring so that participation remains sustainable.

Future researchers should replicate the study with larger samples, multiple schools, different competition levels, and longitudinal designs. Subsequent studies may include type of sport, sex, grade level, attendance, training history, motivation, self-efficacy, sleep, socioeconomic conditions, and academic-support practices. Qualitative interviews may also clarify how student-athletes experience the interaction between training demands and academic responsibilities.

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