

Extent of Implementation of Sports Development Program and Level of Sports Achievements of Students in Public High School

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Abstract

Sports development programs play a crucial role in enhancing students' physical fitness, teamwork, and discipline. However, their overall impact is often limited by challenges such as inadequate resources, inconsistent implementation, and low participation. This study investigates the influence of sports development programs on student performance, skills, fitness, and motivation at Pigcawayan National High School (PNHS) in North Cotabato. While the programs aim to promote key values and improve fitness levels, their effectiveness is hindered by a lack of sufficient facilities, unclear coaching strategies, and minimal student involvement. Focusing on facilities, coaching quality, program structure, and participation, the research employed a descriptive-correlational design. Data were gathered from 50 randomly selected students and analyzed using mean, standard deviation, T-test, and Pearson r correlation. Findings indicate that although the

program is effective, it requires several enhancements. Students considered the available facilities safe but insufficient in number. Coaching was effective in skill development but lacked clarity. The program was engaging, yet not fully integrated with Physical Education (PE). Despite high student enthusiasm, participation levels remained moderate. Students reported improvements in fitness, performance, and skill application, but noted limited recognition from the school. A strong positive correlation ($r = 0.854$, $p < 0.0001$) was found between program implementation and sports achievement. Football and Softball received the highest ratings. To further enhance the program, PNHS should invest in more facilities, improve coaching clarity, better align the program with PE, and recognize student efforts. Consistent support across sports and further research on long-term outcomes are also recommended.

Keywords: *Physical education. Sports development program, sports achievement, quantitative, Philippines*

INTRODUCTION

Sports development programs aim to improve students' fitness, skills, and teamwork at Pigcawayan National High School, their impact on students' sports achievements is unclear. Despite efforts, challenges like limited resources, weak program implementation, and low participation affect outcomes. This study focuses on the level of students' sports achievements—specifically their performance in competitions, skill development, physical fitness, motivation, and recognition. It examines how key program factors such as facilities, coaching quality, program structure, and student involvement influence these outcomes, with the goal of enhancing the effectiveness of sports programs in schools.

Globally, recent studies showed that effective leadership, adequate resources, and strong community support were essential for the success of school sports programs worldwide. In the United States, a study by Cipriano et al. (2024) stated that effective leadership, proper resources, and community support were key to successful sports programs in schools. Similarly, participation in these programs improved students' engagement, social skills, academic performance, and athletic achievements (Salino, Mark, Malabarbas, & Acoba, 2022). However, challenges like inadequate facilities, limited funding, and untrained coaches often hindered success. Addressing these issues through better training and support enhanced student performance and program outcomes (Cipriano et al., 2024; Salino et al., 2022).

In the Asia-Pacific region, sports were prioritized, with China, Japan, and South Korea excelling due to strong government support (Lee & Tan, 2019). China mandated at least two hours of daily physical activity in schools to combat obesity (Reuters, 2025), while Japan and South Korea invested heavily in sports infrastructure and training (Aliran, 2024). In Southeast Asia, Malaysia enhanced student participation through investments in sports infrastructure and training (UNESCO, 2018). However, challenges such as inadequate facilities, limited funding, and untrained coaches persisted (Tech4EdOrion, 2024). Malaysia faced similar issues, including unqualified PE teachers and insufficient training (IOSR Journals, 2024). Regional initiatives like APAC fostered student engagement through sports and arts competitions (APAC-Asia, 2024), while Australia's "Team Up" program promoted inclusion and development through sports (TeamUp.gov.au, 2024).

In the Philippine context, Palarong Pambansa promoted physical education, teamwork, and talent development (Ladaran, 2024). A structured sports development framework focusing on athlete recruitment, retention, and equal opportunities was essential, requiring collaboration among schools, local authorities, and communities (City of Malabon University, 2021). The Philippine Sports Commission also launched grassroots programs to increase youth participation, but limited funding, insufficient coach training, and lack of facilities continued to hinder success (Philippine Sports Commission, 2017; Batangas State University, 2023). Strengthening partnerships between educational institutions and sports agencies was key to improving student achievements.

In the local context, National High School's sports programs aimed to support student growth, but limited resources, uneven implementation, and low participation hindered their effectiveness. Challenges like a lack of trained coaches and inadequate facilities restricted student opportunities (De Vera, 2021). Schools in rural Mindanao faced similar issues, struggling with equipment, facilities, and professional training (Garcia & Ramos, 2020). Local government support also varied, affecting program consistency (Torres, 2019).

Despite the importance of sports programs, little research evaluated their impact on student participation, performance, and well-being in local high schools. Most studies focused on national

programs, overlooking school-level challenges. This gap made it difficult to improve grassroots sports initiatives.

Hence, this study was essential to assess sports program effectiveness, identify improvements, and boost student participation. It aimed to highlight the need for better resources, coach training, and facilities, thereby guiding decision-makers and fostering collaboration for lasting success.

Objective of the Study

This study explores the relationship between the extent of implementation of sports development programs and the level of sports achievements among students at Pigcawayan National High School.

METHODS

This study employed a descriptive-correlational research design to determine the relationship between the implementation of sports development programs and students' sports achievements at Pigcawayan National High School. Descriptive research measured variables as they naturally existed, while regression research examined relationships between independent and dependent variables (Gravetter & Forzano, 2018). Additionally, Curtis et al. (2016) explained that correlational research explored how changes in one variable influenced another, making it a suitable approach for this study. According to Creswell and Creswell (2018), correlational research helped identify patterns and predict outcomes by analyzing the degree of association between variables, further supporting its relevance to this study.

In the context of this study, the descriptive research design was utilized to examine the level of sports program implementation based on facilities, coaching, structure, and participation while evaluating student achievements in competitions, skills, fitness, motivation, and awards. In addition, Pearson r correlation was used to measure the strength of the relationship between these factors. The findings guided administrators in improving programs, optimizing resources, and boosting student participation.

Sampling Technique

The study used simple random sampling to select 50 students from Pigcawayan National High School. This method gave every student an equal chance of being chosen, reducing bias and making the sample representative. Simple random sampling was commonly used in educational research to ensure fairness and improve reliability (Flick, 2018; Etikan et al., 2016).

To implement this, a list of students who met the inclusion criteria was created, and a random number generator or drawing lots was used to select the 50 students. This process ensured fairness and objectivity in participant selection.

RESULTS AND DISCUSSION

Table 1. The Extent of Implementation of Sports Development Programs in Terms of Availability of Facilities.

Availability of Facilities	MEAN	SD	DESCRIPTION
1. I think our school has an adequate number of sports facilities.	3.68	1.20	agree
2. I feel that the sports facilities are maintained in good condition.	3.72	1.13	agree
3. I find it easy to access the sports facilities when needed.	3.78	0.95	agree
4. I believe the equipment provided for sports activities meets our needs.	3.78	1.36	agree
5. I feel that the sports facilities are safe and properly maintained.	3.96	1.11	agree
Section Mean	3.78	0.99	high

The results in Table 1 indicate that the extent of implementation of sports development programs in terms of the availability of facilities is generally positive, with an overall mean of 3.78 (SD = 0.99), interpreted as "Agree." This suggests that respondents perceive their school as having a satisfactory level of sports facility availability, maintenance, accessibility, and safety.

Table 2. The Extent of Implementation of Sports Development Programs in Terms of Quality of Coaching;

quality of coaching	MEAN	SD	DESCRIPTION
1. I believe my coach possesses strong knowledge and skills in sports.	4.30	0.99	strongly agree
2. I feel that the feedback from my coach helps improve my performance.	4.36	1.12	strongly agree
3. I think my coach motivates me to perform at my best.	4.34	1.24	strongly agree
4. I find that the instructions during training sessions are clear and understandable.	4.18	1.17	agree
5. I feel that training with my coach enhances my sports skills.	4.38	0.99	strongly agree
Section Mean	4.31	0.99	very high

The results in Table 2 highlight that the extent of implementation of sports development programs in terms of quality of coaching is perceived as very high, with an overall mean of 4.31 (SD = 0.99). This suggests that respondents strongly recognize the competence of their coaches and the positive impact of coaching on their sports development.

Table 3. The Extent of Implementation of Sports Development Programs in Terms of Program Structure and Content

program structure and content	MEAN	SD	DESCRIPTION
1. I think the sports program is organized and easy to follow.	4.16	0.77	agree
2. I feel that the program offers activities appropriate for all skill levels.	4.02	0.77	agree
3. I believe the program adequately prepares us for sports competitions.	4.14	0.86	agree
4. I find the sports program enjoyable and informative.	4.30	0.81	strongly agree
5. I think the program complements what we learn in PE classes.	3.76	1.08	agree
Section Mean	4.08	0.65	high

The results in Table 3 indicate that the extent of implementation of sports development programs in terms of program structure and content is perceived as high, with an overall mean of 4.08 (SD = 0.65). This suggests that respondents generally view the sports program as well-structured, inclusive, and supportive of their athletic development.

Table 4. The Extent of Implementation of Sports Development Programs in Terms of Participation Rates.

participation rates	MEAN	SD	DESCRIPTION
1. I think a large number of students participate in the sports program.	3.70	0.91	agree
2. I feel that all students are encouraged to participate in sports regardless of their skill level.	3.86	1.01	agree
3. I feel excited about joining the sports activities at school.	4.60	0.83	strongly agree
4. I believe there are incentives or rewards that promote sports participation.	3.78	1.30	agree

5. I feel that my family and community support my involvement in sports.	4.24	1.17	strongly agree
Section Mean	4.04	0.68	high

The results in Table 4 indicate that the extent of implementation of sports development programs in terms of participation rates is perceived as high, with an overall mean of 4.04 (SD = 0.68). This suggests that students are generally engaged in the sports program, with notable enthusiasm and support from their families and communities.

Table 5. Summary of Extent of Implementation of Sports Development

Programs			
Indicator	MEAN	SD	DESCRIPTION
1. Availability of facilities.	3.78	0.99	high
2. quality of coaching	4.31	0.99	very high
3. program structure and content.	4.08	0.65	high
4. participation rates.	4.04	0.68	high
Grand Mean	4.05	0.70	high

The results in Table 5 show that sports development programs are well-implemented, with a grand mean of 4.05 (high). The highest score was for the quality of coaching (4.31 – very high), followed by availability of facilities (3.78), program structure and content (4.08), and participation rates (4.04), all rated high. This suggests that trained coaches and good facilities are key to effective program delivery and participant engagement (Baker et al., 2023; Brown & Nguyen, 2022; Radic, 2024).

Table 6. The Level of Sports Achievement of the Students in Terms of Student Performance in Competitions.

student performance in competitions	MEAN	SD	DESCRIPTION
1. I think I perform well in sports competitions.	4.18	0.80	agree
2. I believe my performance during competitions has improved as a result of the program	4.26	0.80	strongly agree

3. I feel that my overall physical performance in sports has improved because of the program.	4.38	0.73	strongly agree
4. I think my confidence during sports activities has increased due to the program.	4.22	0.74	strongly agree
5. I feel that my achievements in sports are acknowledged by the school.	3.56	1.33	agree
Section Mean	4.12	0.56	high

The results in Table 6 indicate that the level of sports achievement of students in terms of performance in competitions is perceived as high, with an overall mean of 4.12 (SD = 0.56). This suggests that students generally recognize improvements in their sports performance and confidence due to the sports development program.

Table 7. The Level of Sports Achievement of the Students in Terms of Skill Development;

skill development	MEAN	SD	DESCRIPTION
1. I think the program has enhanced my technical sports skills.	4.24	0.94	strongly agree
2. I feel that I can effectively apply the techniques learned during training in actual games.	4.44	0.64	strongly agree
3. I believe the program introduces new and practical skills for sports.	4.20	0.81	agree
4. I think my sports skills have continuously developed over time because of the program.	4.12	0.90	agree
5. I feel confident in executing the sports techniques I have learned.	4.32	0.82	strongly agree
Section Mean	4.26	0.65	very high

The results in Table 7 indicate that the level of sports achievement of students in terms of skill development is perceived as very high, with an overall mean of 4.26 (SD = 0.65). This suggests that students strongly agree that the sports development program has significantly enhanced their technical abilities, confidence, and application of learned skills in actual games.

Table 8. The Level of Sports Achievement of the Students in Terms of Physical Fitness Levels;

physical fitness levels	MEAN	SD	DESCRIPTION
1. I think the program contributes to my overall physical fitness and health.	4.46	0.61	strongly agree
2. I feel that the program encourages me to remain active and physically strong.	4.46	0.73	strongly agree
3. I believe my endurance and stamina have improved through participation in sports.	4.56	0.67	strongly agree
4. I think the program supports me in maintaining a healthy body weight.	4.28	0.78	strongly agree
5. I feel more energetic and focused after engaging in sports activities.	4.48	0.71	strongly agree
Section Mean	4.45	0.52	very high

The results in Table 8 demonstrate that the level of sports achievement of students in terms of physical fitness levels is very high, with an overall mean of 4.45 (SD = 0.52). This suggests that students strongly agree that the sports development program has significantly contributed to their physical well-being, stamina, and energy levels.

Table 9. The Level of Sports Achievement of the Students in Terms of Motivation and Attitude Towards Sports.

motivation and attitude towards sports	MEAN	SD	DESCRIPTION
1. I think the sports program increases my motivation to participate in activities.	4.26	0.90	strongly agree
2. I feel that my confidence in playing sports has been enhanced by the program.	4.10	0.93	agree
3. I believe the program makes sports activities more enjoyable for me.	4.42	0.88	strongly agree
4. think I take pride in my sports achievements because of the program.	3.92	1.08	agree
5. I feel inspired by the program to be more actively involved in school activities.	4.24	0.96	strongly agree
Section Mean	4.19	0.76	high

The results in Table 9 reveal that the level of sports achievement of students in terms of motivation and attitude towards sports is high, with an overall mean of 4.19 (SD = 0.76). This indicates that students generally perceive the sports development program as a strong motivator, enhancing their enjoyment, confidence, and engagement in sports.

Table 10. The Level of Sports Achievement of the Students in Terms of Recognition and Awards.

recognition and awards	MEAN	SD	DESCRIPTION
1. I think my efforts in sports are recognized by the school.	3.56	1.37	agree
2. I feel that the school acknowledges my achievements in sports.	3.56	1.34	agree
3. I believe I have received appropriate recognition (awards or certificates) for my participation in sports.	3.68	1.42	agree
4. I think that such recognition motivates me to improve my performance in sports.	3.98	1.30	agree
5. I feel encouraged by the recognition and support I receive for my sports efforts.	4.10	1.23	agree
Section Mean	3.78	1.25	high
OVERALL LEVEL OF SPORTS ACHIEVEMENT	4.16	0.64	high

The results in Table 10 indicate that the level of sports achievement of students in terms of recognition and awards is high, with an overall mean of 3.78 (SD = 1.25). This suggests that while students feel their sports participation is acknowledged, there is still room for improvement in providing consistent and meaningful recognition for their efforts.

Table 11. Summary for Level of Sports Achievement of the Students

Indicator	MEAN	SD	DESCRIPTION
1. student performance in competitions	4.12	0.56	high
2. skills development	4.26	0.65	very high

3. physical fitness levels	4.45	0.52	very high
4. motivation and attitude towards sports	4.19	0.76	high
5. recognition and awards	3.78	1.25	high
Grand Mean	4.16	0.64	high

The results in Table 11 indicate a high overall level of sports achievement among students, with a grand mean of 4.16. Among the indicators, physical fitness levels ($M = 4.45$, $SD = 0.52$) and skills development ($M = 4.26$, $SD = 0.65$) received "very high" ratings, highlighting that students are not only physically fit but also continually improving in athletic skills. This aligns with recent findings by Liu et al. (2023), who emphasized that structured sports programs significantly enhance students' physical capabilities. Similarly, Radic (2024) pointed out that physical fitness gains are directly tied to consistent engagement in school-based training, while Lee, Gillaspay, and Chapel (2023) found that skill acquisition in sports leads to improved performance and increased self-efficacy among youth.

Table 12. Significant Relationship Between the Extent of Implementation of Sports Development Programs and the Level of Sports Achievements Among Students.

variables	r	p-value
extent of implementation level and of sports achievements	0.85	<0.0001

$\alpha=0.05$ level of significance

The results in Table 12 indicate a very strong significant relationship between the extent of implementation of sports development programs and the level of sports achievements among students ($r = 0.854$, $p < 0.0001$). This suggests that as the implementation of sports development programs improves, students' sports achievements also increase.

Table 13. The Significant Difference in the Implementation of Sports and Development Programs Among Different Sports Events.

Variables	P-value	Description
Sports Events	0.155	Not Significant

$\alpha=0.05$ level of significance

The results from Table 13 indicate that there is no significant difference in the implementation of sports development programs among different sports events, as evidenced by the ANOVA ($p = 0.155$).

This suggests that the extent to which sports development programs are implemented is relatively uniform across different sports such as Arnis, Basketball, Football, Futsal, Sepak Takraw, Softball, and Volleyball.

Table 14 The Significant Difference in the Implementation of Sports And Development Programs Among Different Sports Events. (Tukeys Post-Hoc Test)

		arnis	Basket- ball	Foot- ball	futsal	Sepak Takraw	Soft- ball	Volley- ball
arnis	Mean		-0.35	-0.46	-0.30	0.52	-0.38	0.20
	Difference							
basketball	p-value		0.97	0.95	1.00	0.91	0.91	0.99
	Mean			-0.10	0.32	0.87	-0.03	0.55
	Difference							
	p-value			1.00	0.98	0.50	1.00	0.61
football	Mean				0.43	0.98	0.08	0.66
	Difference							
	p-value				0.96	0.49	1.00	0.64
futsal	Mean					0.55	-0.35	0.23
	Difference							
	p-value					0.88	0.94	0.99
Sepak takraw	Mean						-0.90	-0.32
	Difference							
	p-value						0.35	0.98
softball	Mean							0.58
	Difference							
	p-value							0,30
Volleyball	Mean							
	Difference							
	p-value							

$\alpha=0.05$ level of significance

Table 14 shows that there is no significant difference in the implementation of sports development programs among the different sports events, as all p-values are greater than 0.05. This means that sports like Arnis, Basketball, Football, Futsal, Sepak Takraw, Softball, and Volleyball are implemented at relatively similar levels. The highest mean difference observed (e.g., 0.98 between Football and Sepak Takraw) was still not statistically significant, indicating that no single sport had a notably better or worse implementation than the others. This suggests a uniform approach in program delivery across various sports disciplines.

SUMMARY/ CONCLLUSION/RECOMMENDATION

Statement of the Problem	Summary	Conclusion	Recommendation
1. What is the extent of implementation of sports development programs in terms of: 1.1 availability of facilities; 1.2 quality of coaching; 1.3 program structure and content, and 1.4 participation rates?	The findings show that the program is well-received but has areas for improvement. Schools generally offer safe, well-maintained sports facilities (M = 3.78), though facility adequacy needs attention (M = 3.68). Coaching quality is strong (M = 4.31), especially in skill development (M = 4.38), but clearer instruction is needed (M = 4.18). The program structure is positively rated (M = 4.08) and engaging (M = 4.30), though better integration with PE lessons is needed (M = 3.76). While student enthusiasm is high (M = 4.60), overall participation is lower (M = 3.70), highlighting a need for more inclusive strategies.	The sports program is generally well-received, but improvements are needed. Facilities are good, but more are required. Coaching is strong, though clearer instruction would help. The program is engaging, but better integration with PE is needed. Lastly, student enthusiasm is high, but participation could be more inclusive.	Schools may invest in expanding and upgrading sports facilities to address inadequacies and support wider student participation, while also enhancing coach training to improve instructional clarity and better integrate sports programs with Physical Education classes.

Statement of the Problem	Summary	Conclusion	Recommendation
2. What is the level of sports achievement of the students in terms of: 2.1 student performance in competitions; 2.2 skill development; 2.3 physical fitness levels; 2.4 motivation and attitude towards sports, and 2.5 recognition and awards?	Students reported improved performance from the program ($M = 4.12$), especially in physical fitness ($M = 4.38$) and applying skills in games ($M = 4.44$). Skill development was rated highly ($M = 4.26$), though progress in continuous development varied ($M = 4.12$). The main concern was the low recognition of achievements by the school ($M = 3.56$), suggesting a need for better acknowledgment of student success. Overall, the program effectively enhanced fitness and athletic skills ($M = 4.45$).	The program has positively impacted students' physical performance and skill development, particularly in applying techniques during games. However, there is a need for better recognition of student achievements and more consistent skill progress. Overall, the program has greatly contributed to students' physical fitness and health.	To further motivate students and enhance their achievements, schools may implement a formal recognition system to acknowledge student progress and accomplishments, while also focusing on ensuring consistent skill development throughout the program.
3. Is there a significant relationship between the extent of implementation of sports development programs and the level of sports achievements among students?	The findings show a very strong relationship between how well sports programs are implemented and student sports achievement ($r = 0.854$, $p < 0.0001$). Better-managed programs lead to higher performance. This supports Self-Determination Theory, which highlights the importance of competence, autonomy, and connection in driving sports success.	The findings show a strong link between the quality of sports programs and student achievements, highlighting that well-structured and well-managed programs lead to better student performance. This supports the idea that fostering competence, autonomy, and relatedness is key to sports success.	To maximize student achievement, schools may focus on further enhancing the structure, maintenance, and management of sports development programs, ensuring they are well-organized and provide opportunities for students to develop competence, autonomy, and relatedness.

4. Is there a significant difference in the implementation of sports and development	The study found no significant difference in how sports programs are implemented across different sports	The study found no significant differences in how sports development programs are implemented	To ensure equitable opportunities for all students, schools may focus on providing consistent access to quality
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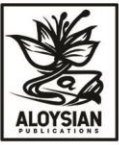
programs among different sports events?	($p = 0.152$), indicating consistent implementation. Although Football ($M = 4.48$) and Softball ($M = 4.43$) had the highest ratings and Sepak Takraw the lowest ($M = 3.50$), the differences weren't statistically significant. This underscores the need for equal access to training, facilities, and coaching across all sports.	across various sports. While some minor variations were noted, the findings emphasize the need for equal access to training, facilities, and coaching support for all sports.	training, facilities, and coaching across all sports disciplines, addressing any disparities such as those observed in Sepak Takraw.
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Recommendation

Future researchers should study the long-term effects of sports programs on students' academics, well-being, and career paths. Comparing different schools' programs can help identify best practices for improvement.

REFERENCES

- Abraham, A., & Collins, D. (2011). Effective skill development: How should athletes' skills be developed? In D. Collins, A. Button, & H. Richards (Eds.), *Performance psychology: A practitioner's guide* (pp. 207–229). Elsevier. <https://doi.org/10.1016/B978-0-443-06734-1.00015-8>
- Acak, M., Buyukcelebi, H., Arslanargun, C., & Bayer, R. (2023). Life skills development through sports among student-athletes: A survey of secondary schools. *International Journal of Physical Education, Fitness and Sports*, 12(2), 39–47. <https://doi.org/10.54392/ijpefs2324>
- Agustin, L. D. (2022). Academic performance of student-athletes: Basis for Project SAW (Student-Athletes for the Win) a school sports program. *IOER International Multidisciplinary Research Journal*, 4(1). <https://orcid.org/0000-0003-4831-9435>
- Alahmed, M., Yusof, A., & Shah, P. (2016). Attitude, sports participation, and academic performance of undergraduate student-athletes in Saudi Arabia. *Journal of Physical Education and Sport (JPES)*, 16(3), Article 157, 1000–1004. <https://doi.org/10.7752/jpes.2016.03157>
- Côté, J., & Turnnidge, J. (2021). The role of coaching in athlete development:



A review and future directions. *International Journal of Sports Science & Coaching*, 16(3), 456–472.
<https://doi.org/10.1177/1747954121993703>

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.

Ebio, M. J. P., & Digo, G. S. (2024). Sports development program: The case of technical vocational high school in the province of Sorsogon, Philippines. *International Journal of Social Science and Education Research Studies*, 4(5), 361–372. <https://doi.org/10.55677/ijssers/V04I5Y2024-03>

Eccles, J. S., & Gootman, J. A. (2022). *Community programs to promote youth development*. National Academy Press.
Eccles, J. S., & Wigfield, A. (2021). *Motivation to succeed: A social-cognitive perspective*. *Annual Review of Psychology*, 72(1), 29–54. <https://doi.org/10.1146/annurev-psych-010419-051217>