



CONDITIONING TRAINING TOWARDS THE DEVELOPMENT OF PHYSICAL FITNESS AMONG JUNIOR HIGH SCHOOL ATHLETES

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ABSTRACT

*The achievement of student-athletes in various sports is often linked to the rigor of training that prepares them for competitions and enhances their physical fitness. Thus, this study determined the relationship between the engagement in conditioning training of a random sample of 76 junior high school student-athletes to the development of their physical fitness along health-related and skill-related physical fitness components. The researcher employed a descriptive correlational study through the administration of a researcher-made questionnaire and a Revised Physical Fitness Test by the Department of Education. Collected data were gathered, tabulated, interpreted, and treated using frequency count, mean, standard deviation, and Pearson *r*. The study revealed that the student-athletes were mostly of normal Body Mass Index (BMI), engaged in team sports, had been athletes for 4 to 5 years, and participated in competitions within the division level. They were highly engaged in conditioning training which enhanced the development of their physical fitness as affirmed by the computed *r*-values when these variables were paired for correlation. This study calls for revitalized conditioning training through innovations and engagement in co-curricular and extra-curricular focusing on health-related and skill-related physical fitness. This revitalization can be incorporated into the athletic program to ensure continuous sports achievements and enhancement of physical fitness of student-athletes.*

Keywords: conditioning training, physical fitness, sports, student-athletes.

INTRODUCTION

The Philippines acknowledges the importance of a healthy populace in which citizens are taking active roles in nation-building. The promotion of Physical Education is seen as essential in developing and maintaining this healthy and productive populace. In this accord, the country's constitution prioritizes the holistic development of its citizens through the encouragement of sports programs, league competitions, and the like to foster discipline, teamwork, and excellence among Filipinos, Philippine Constitution. Art. XIV (1987). Hence all educational institutions are expected to undertake regular sports activities.

Republic Act No. 9155 otherwise known as the "Governance of Basic Education Act of 2001" and

Republic Act No. 5708 or "The Schools Physical Education and Sports Development Act of 1969" also provides that integrated physical education and school sports and physical fitness programs shall remain part of the basic education curriculum and shall be undertaken by the Department of Education, RA 1955, Governance of Basic Education Act of 2001.

The Department of Education, the agency in charge of the country's basic education cycle or the K-12 system, should ensure greater focus on the formative years of the country's pool of athletes. The institutionalization of varsity sports teams in basic education, along with after-school sports programs (ASSP), will improve the identification, selection, and long-term training of athletes in various sporting events. Through a varsity system,

student-athletes in K-12 will have a better chance to play athletically at a higher level. Furthermore, an institutionalized varsity sports team in basic education can pave the way for the provision of training equipment and the upkeep of modern facilities that can help improve the training of young athletes, RA 5708, The School Physical Education and Sports Development of 1969.

To achieve this aim, a rigorous conditioning training program is needed to strengthen and maintain the physical fitness of the athletes enabling them to be prepared and ready for various sports competitions.

Despite the continuous effort of the Tanauan City School Division to achieve higher ranks in the Southern Tagalog CALABARZON Athletic Meet, the results still show that athletic players in Tanauan have difficulties in showing good competition performance. Tanauan City has been in the bottom teams within the CALABARZON rankings. This seems to indicate that athletes fail to display improvement despite participating every year.

This research aims to strengthen the Tanauan City School Division's athletes by proposing a conditioning training program that can help the athletics coaches develop better athletes. The researcher strongly believes that strengthening the athletes' physical fitness can be key to developing better and stronger athletes.

In line with this, the researcher aims to determine the relationship of conditioning training to the development of physical fitness of athletes to propose a conditioning program that can elevate the performance of the athletes.

OBJECTIVES OF THE STUDY

The study proposed a conditioning training program that could support the development of junior high school athletes' physical fitness by testing the significant relationship between the level of their engagement in conditioning training and their development of physical fitness. The study focused on varsity players who participated in the Tanauan City Division Sports Meet and other sports competitions.

The study described the profile of junior high school athletes in terms of their body mass index, types of sports participated in, number of years as athletes, and highest competition level attained. Second, the study determined the level of engagement of these athletes in conditioning training, specifically plyometrics and foundational drills such as warm-up drills, speed drills, agility drills, and landing drills.

This study also described the athletes' development of physical fitness in terms of health-related components such as body composition, cardiovascular endurance, strength, and flexibility, as well as skill-related components such as coordination, agility, speed, power, balance, and reaction time. Fourth, the study tested the significant relationship between the athletes' engagement in conditioning training and their development of physical fitness.

METHODOLOGY

The descriptive method of research was employed in this study. It is a research process by which the data gathered will be organized and analyzed. It is directed towards gathering the nature of a situation as it exists at the time the study is conducted. Thereafter, a significant conclusion will be derived. The focus is on the process of discovery of meaning through the comparison of finding relationships of one kind or another. The process goes beyond gathering and tabulating data. It involves the interpretation of the meaning or significance of what is described, Creswell (2014).

This study covered student-athletes who were junior high school athletes and varsity players enrolled at Tanauan Integrated High School during the School Year 2022-2023. They were selected as the study's respondents as they were engaged in conditioning training to strengthen their physical fitness in preparation for athletic and sports competitions. Thus, they provided reliable data on how their engagement in conditioning training helps in the development of physical fitness.



Table 1
Distribution of the Respondents by Sports

Sports Competed	Student-Athletes	
	Population	Sample
Badminton	8	6
Baseball	14	12
Basketball	12	10
Swimming	8	6
Table Tennis	8	6
Taekwondo	10	8
Track and Field	10	8
Volleyball (Boys)	12	10
Volleyball (Girls)	12	10
Total	94	76

A self-constructed questionnaire made by the researcher was used to gather the necessary information about the student athletes' profile and their engagement in conditioning training. This researcher-made questionnaire is divided into two parts. The first part surveys the profile of student-athletes in terms of body mass index, types of sports participated, number of years as athletes, and highest competition level attained. Meanwhile, the second part determines the student athletes' level of engagement in conditioning training relative to plyometrics and foundational drills. On the other hand, the physical fitness test enclosed in the Revised Physical Fitness Tests (PFT) Manual of the Department of Education will be used in assessing student athletes' health and skill-related physical fitness.

In the conduct of the study, the researcher sought the approval of the Principal of Tanauan City Integrated High School to administer copies of the researcher-made questionnaire to the target respondents. Upon approval, the researcher coordinated with the advisers, teachers, and coaches of the student-athletes to avoid possible future disturbance of classes during the time of administration of the questionnaire. Before conducting the survey and physical fitness tests, a formal letter of consent was sent to the parents or legal guardians of the students to secure their voluntary participation. The parents or legal guardians were informed that the student-athletes as respondents could withdraw from the study at

any time without penalty. Consent forms given to them clearly stated the research objectives, data collection methods, and activities which were articulated to all the respondents. To ensure the safety of the respondents, provisions were made for monitoring the data collected. The results of the survey were made available to the respondents. Concerns with respect to the respondents' rights, interests, and privacy were religiously addressed by the researcher.

The following statistical tools were used to gather data which served as bases for the analysis and interpretation of data. Frequency and Percentage were used to distribute the respondents according to their profiles. Mean was used to determine the respondents' level of engagement in conditioning training and their assessment of the development of their physical fitness. Standard Deviation was utilized to determine the variability of the respondents' responses on the questionnaire describing their level of engagement in conditioning training and their assessment of the development of their physical fitness. Pearson r was employed to determine if a significant relationship exists between the respondents' level of engagement in conditioning training and their assessment of the development of their physical fitness.

RESULTS AND DISCUSSION

1. Junior High School Athletes' Profile

The success of conditional training for athletes in developing their physical fitness lies in designing appropriate activities that would consider their profile characteristics. Considering the different backgrounds of the athletes is the key to innovating and strengthening their skills and capabilities. Moreover, the interaction between the athletes' personal attributes and engagement with significant training can empower them to fully perform in different athletic competitions. In this undertaking, the evaluation of the profile of the athletes comprises the determination of their body mass index, types of sports participated in, number of years as athletes, and highest competition level attained.



1.1. In terms of Body Mass Index

Table 2
Profile of Junior High School Athletes in Terms of Body Mass Index

Body Mass Index	Frequency	Percentage
normal	65	85.5%
obese	3	3.9%
pre-obese	4	5.3%
underweight	4	5.3%
Total	76	100%

Table 2 shows the profile of junior high school athletes in terms of their body mass index. This reveals that the majority of junior high school athletes were normal in terms of body mass index. Out of the total sample of 76, there were 65 (85.5%) athletes with normal body mass index and there were only three (3.9%) classified as obese. A larger number of discrepancies were exposed. This discrepancy was supported by Matte (2019) noting that it is evident that athletes may differ in terms of BMI, some might have a higher one but a low percentage of body fat and vice-versa.

1.2. In terms of Types of Sport

Table 3
Profile of Junior High School Athletes in Terms of Types of Sport

Types of Sports	Frequency	Percentage
dual	5	6.6%
individual	24	31.6%
team	47	61.8%
Total	76	100%

Table 3 shows the profile of junior high school athletes in terms of their types of sports. It could be observed that the majority of the athletes prefer to play in a team. It gained a total of 47 or 61.8% of the total sample population. However, there were still athletes who preferred to play with a partner or in dual sports. It obtained a frequency of 5 or 6.6%. Given these numbers, it is evident that most of the athletes preferred playing in teams as this allows them to strategize toward a common goal in which each player feels accountable for their course of action (Harvey et. al, 2014).

1.3. In terms of Years as an Athlete

Table 4
Profile of Junior High School Athletes in Terms of Years as an Athlete

Years as an Athlete	Frequency	Percentage
1 year and above	3	3.9%
2 - 3 years	22	28.9%
4 - 5 years	42	55.3%
6 years - above	9	11.8%
Total	76	100%

Table 4 illustrates the profile of junior high school athletes in terms of their years as athletes. This illustration reveals that the majority were already student-athletes in their 4th to 5th year. It gained 42 out of 76 total respondents with 55.3% of the total percentage. Few started their journey as student-athletes. This comprises 3.9% of the total respondents.

The results presented in Table 4 suggest that the majority of junior high school athletes have been engaged in sports for several years prior to their current status as student-athletes. This finding is consistent with previous research on youth sports participation, which has shown that many children begin participating in organized sports at a young age, Brenner (2016). The fact that 55.3% of the respondents had been involved in sports for 4-5 years suggests that these athletes have had ample opportunity to develop their skills and gain experience in their chosen sport.

It is also noteworthy that only a small percentage of the respondents (3.9%) began their athletic journey as student-athletes. This finding is consistent with research on sports specialization, which suggests that early specialization in a single sport is relatively uncommon among young athletes, Merkel et. al (2013) & Myer et. al (2015). Instead, most young athletes engage in a variety of sports and activities before choosing to focus on a single sport later in their development.

1.4. In terms of the Highest Competition Attained



Table 5
Profile of Junior High School Athletes in Terms of Highest Competition Attained

Highest Competition Attained	Frequency	Percentage
District	5	6.6%
Division	26	34.2%
International	8	10.5%
National	7	9.2%
Regional	30	39.5%
Total	76	100%

Table 5 presents the highest competition attained by junior high school athletes. It reveals that 30 or 39.5% competed at the regional level. On the other hand, there are 5 or 6.6% who competed only at the district level.

2. Junior High School Athletes' Level of Engagement in Conditioning Training

The junior high school athletes' level of engagement in conditioning training was also surveyed. This is to determine if proper conditioning allows an athlete to strengthen supporting muscles, even out muscle imbalances, increase mobility, correct posture, stabilize joints, learn new movement patterns, enhance coordination and peripheral skills, and the like. The results of this survey are presented in the succeeding tables.

Table 6
Junior High School Athletes' Level of Engagement in Conditioning Training

Indicators	\bar{x}	SD	VI
1. Polymetrics	3.73	0.17	HE
2. Foundational Drills			
Warm-Up Drills.	3.76	0.17	HE
Speed Drills	3.72	0.18	HE
Agility Drills	3.72	0.19	HE
Landing Drills	3.71	0.18	HE
Overall	3.73	0.18	HE

These results imply that plyometric training is a crucial aspect of sports performance training for student-athletes. It requires highly coordinated and skillful movements, which necessitate careful coaching by qualified personnel to avoid injuries,

Davies (2015).

The study also found that warm-up drills are highly engaging for student-athletes, as they serve as a requirement for continuous progress in acquiring the necessary skills to master their chosen sport, BridgeAthletic (2018). These drills are crucial for injury prevention and enhancing athletic performance. The research also suggests that warm-up drills increase flexibility, improve balance and coordination, and enhance muscle activation, BridgeAthletic (2018).

The study reveals that speed drills are highly engaging for student-athletes as they are the first component of any sports performance training program. These drills prepare and condition athletes for heavy and active physical activities. The research findings suggest that speed drills improve agility and quickness, enhance cardiovascular fitness, and increase muscle power, Steele (2020).

The research findings also indicate that agility drills are important for student-athletes to strengthen endurance, combination, balance, and reaction time while also preventing injuries and enhancing cognitive function, Vertimax (2018). These drills increase the athlete's ability to change direction quickly and maintain balance while doing so. Additionally, the study suggests that agility drills improve cognitive function by requiring athletes to react quickly and make split-second decisions.

The study found that landing drills are highly engaging for student-athletes as they enable them to absorb the intensity of their varied training by strengthening their joints, Quinn (2020). These drills also teach athletes proper landing techniques, which enable them to put their bodies in the right position to land safely and minimize or avoid injuries. The research also suggests that landing drills increase proprioception, which is the body's ability to sense its position in space and time.

3. Junior High School Athletes' Development of Physical Fitness

The development of the physical fitness of student-athletes in both health and skill-related



fitness is also accounted for. This was done through administering and conducting various physical fitness tests using the Revised Physical Fitness Test Manual by the Department of Education in compliance with the DepEd Order Number 034 Series of 2019.

The test results were analyzed and presented in subsequent tables. The data gathered from the test could be useful in tailoring workout routines and conditioning programs for student-athletes based on their individual needs. Coaches could utilize this data to identify areas where their players need improvement and develop strategies to address those weaknesses.

3.1. In terms of Health-Related Components

Table 7
Junior High School Athletes' Development of Physical Fitness as to Health-Related Components

	Min.	Max.	\bar{x}	SD
Body Composition	17.00	43.00	22.62	3.81
Cardiovascular Endurance	58.00	101.00	82.49	9.30
Strength	18.00	41.00	32.03	5.33
Flexibility	33.80	68.70	60.20	6.83

As to the body composition, the majority of these student-athletes had normal BMI. This result indicates the awareness of the student-athletes to practice good dietary habits to enhance their sports performance.

In terms of cardiovascular endurance, the result can be attributed to the engagement of student-athletes in various exercises that help them condition their bodies during competitions. A similar observation is noted by Sharma (2015), indicating that the cardiovascular benefits of exercise are established and individuals exercising regularly can reduce their risk of adverse events from coronary artery disease by 50% and gain at least 3 additional years of life.

As to strength, the majority of these student-athletes had excellent strength. This result can be traced to the notion that developing strength

improves an individual's performance across a wide range of both general and sport-specific skills; hence, student-athletes acknowledge its importance in their sports competition as this helps them reduce their risk of injury when performing activities relevant to sports. Likewise, Suchomel et al. (2016), asserted that muscular strength influences the various factors associated with athletic performance. Greater muscular strength is strongly associated with improved force-time characteristics that contribute to an athlete's overall performance.

In terms of flexibility, the majority of these student-athletes had excellent flexibility. This result can be attributed to the importance of flexibility in numerous sports competitions; thus, student-athletes develop initiative in increasing their training in flexibility for better performance in sports tournaments. Stretching exercises and improving flexibility are important for long-term performance in sports. Flexibility is an important aspect of the optimal function of the body and can maximize the performance of athletes.

Similarly, Gleim and McHugh (1997) attested to the relationship between flexibility and athletic performance. Flexibility serves as a factor that influences one's health and physical fitness along with muscle strength and body stability; its optimal level of manifestation reduces the risk of injury and increases motor performances during daily activities, leisure time activities, or sports/competitive activities.

Table 8 illustrates the respondents' development of skill-related physical fitness. The data reveal that these student-athletes had very good to excellent coordination.

This result can be attributed to the notion that coordination abilities are prerequisites for individual and team performance. Hence, it is a requirement for student-athletes to intensify their coordination skills to better engage in various sports as these sports demand particular performance in coordination that they are expected to fulfill. The same observation is noted by Hrusova (2017) who states that coordination abilities are essential in accelerating and for higher efficiency



of the process of new motor skills acquisition, stabilization, and fining the acquired skills, level of utilizing condition abilities, and influence on aesthetic feelings, enjoyment, and satisfaction. The feelings result from dynamic, rhythmic, harmonious, and full-amplitude motion of fine coordination.

3.2. In terms of Skill-related Components

Table 8
Junior High School Athletes' Development of Physical Fitness as to Skill-related Components

	Min.	Max.	\bar{x}	SD
Coordination	32.00	49.00	42.57	5.07
Agility	3.80	14.30	6.56	2.84
Speed	4.40	6.90	5.58	0.56
Power	134.00	223.00	196.84	20.79
Balance	20.00	64.00	43.87	12.39
Reaction Time	0.30	7.70	2.60	2.26

In terms of agility, the data reveal that these student-athletes had good to excellent agility. This result implies that student-athletes deemed the importance of developing agility for sports as it is essential for improved athletic performance. As Agility combines speed, balance, strength, coordination, and body control in one movement, this can improve balance and stability which are important to any sports competition. Relative to this, Paul et al. (2016) emphasized that agility is regarded as a key aspect of performance in team sports and is considered capable of discriminating between higher-skilled individuals and their lesser-skilled counterparts.

Considering their speed, the data reveal that these student-athletes had very good to excellent speed. This result implies that student-athletes deemed the importance of speed as their advantage in sports; thus, they value developing their speed. Athletes who can move faster than their opponents have an advantage by being quicker than other competitors which will enable

them to outrun their pursuers.

As to power, the data reveal that these student-athletes had good to excellent power. This result can be traced to the notion that enhanced physical fitness power can have several effects on student-athletes' performance and overall wellness. These benefits include increased aerobic capacity and injury prevention. When power is developed through proper training, it can help student-athletes to develop stronger and more resilient connective tissue which can reduce the risk of injury from sprains or strains. In the same manner, Marwat et al. (2022), noted that power being the ability of the body to work at a high rate is important for various sports as it is often linked to improving physical performance and capacity of the body.

In terms of balance, the data reveal that these student-athletes had a fair balance. Although the data reveals that there were several student-athletes whose balance falls under needs improvement and good, the majority of these student-athletes obtained a balance that can be categorized as fair. This implies the need to further address this skill-related fitness of the student-athletes to maximize their potential in sports competitions. The researcher also observed that there is a need to revisit the assessment of this aspect of physical fitness as it was deemed problematic as indicated by the low performance of the student-athletes. Likewise, Zemková (2014) also asserted that there had been problematic discrimination of athletes in terms of balance capabilities. She suggested alternative methods, such as stabilogram-diffusion analysis to investigate the dynamic nature of postural sway. Different approaches have clarified the role that balance plays in sports performance.

Considering their reaction time, the data reveal that these student-athletes had very good to excellent reaction time. This result indicates that student-athletes could immediately respond to a stimulus when engaged in sports competitions. This capability allows them to react quickly to a stimulus and be attentive to the roles they play in any sports competition. Relative to this, Atan and Akyol (2014) emphasized that athletes must show high



performance in their reaction time to be successful in sports events as this capability will enable them to be mindful of the time, they consume between receiving an immediate and unexpected stimulus and reaction given to it.

4. Relationship between the Level of Engagement in Conditioning Training and Development of Physical Fitness

The relationship between the level of engagement in conditioning training and the development of physical fitness was tested by applying appropriate statistical measures. The results of this correlation are presented in the following table.

Table 9
Relationship between the Junior High School Athletes' Level of Engagement in Conditioning Training and their Development of Physical Fitness

Engagement in Conditioning	Development of Physical Fitness									
	BC	CE	ST	FL	CO	AG	SP	POW	BL	RT
Plyometrics	-0.208	-.351**	0.222	.262*	.256*	-0.196	-0.156	0.151	0.224	-0.218
Warm-Up Drills	-.388	-.379**	.264*	.226*	-0.023	-.276*	-0.197	0.198	.237*	-0.058
Speed Drills	-.275*	-.397**	.283*	.251*	.241*	-.433**	-.322**	.288*	0.128	-0.054
Agility Drills	-0.087	-.256*	0.074	0.009	-0.054	-0.161	-0.120	0.096	-0.068	-0.013
Landing Drills	-.351**	-.368**	0.142	.296**	0.020	-.363**	-0.190	0.223	0.190	-0.147

Legends: **. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

BC-Body Composition, **CE**-Cardiovascular Endurance, **ST**-Strength, **FL**-Flexibility, **CO**-Coordination, **AG**-Agility, **SP**-Speed, **POW**-Power, **BL**-Balance, **RT**-Reaction Time

Table 9 presents the relationship between the level of engagement in conditioning training of student-athletes and the development of their physical fitness.

When the student-athletes' engagement in conditioning training in terms of plyometrics is paired with their development of physical fitness, the obtained R-values reveal a significant relationship for cardiovascular endurance at 0.01 alpha level and significant relationships for flexibility and coordination at 0.05 level. This means that engaging in plyometrics influences cardiovascular endurance, flexibility, and coordination of student-athletes and vice versa. Likewise, Slimani et al. (2016) found that

plyometrics have significant effects on physical fitness in team sport athletes as their incorporation in the workout routines of technical and tactical training is fundamental for amateur and elite team sport athletes. It is also worth noting that when Plyometrics is paired with cardiovascular endurance, a negative correlation at 0.01 level was revealed. This emphasizes that plyometric training makes the athletes tired faster triggering the cardiovascular endurance of the athletes, Spoons (2019).

The student-athletes' engagement in conditioning training in terms of warm-up drills is also paired with their development of physical fitness. The generated R-values disclose a significant relationship between body composition and cardiovascular endurance at 0.01 alpha level and a correlation for strength, flexibility, agility, and balance at 0.05 level. This means that engaging in warm-up drills influences the majority of the components of physical fitness development as these drills play an active role in preparing the players to perform their kinetic exercises in training. Players' performance is improved when the muscles and organs of the body have taken an ample amount of warm-up before the performance in the training or the game. A similar observation was noted in the study of Alanazi (2016) which found that improvement in sports activity can be achieved using other sports events activities, particularly athletics field to warm up, considering it as a form of exercise and transactions that can lead to upgrade skills and physical level. Moreover, it is also important to highlight when the warm-up drills were paired with body composition, cardiovascular endurance, and agility a negative correlation was revealed. This means that war-um drills require so much intensity and the tendency is for athletes to exert more energy than they need in the sport itself compromising cardiovascular endurance and agility. It can also result in bad performance.

Meanwhile, the generated R-values reveal a significant relationship for cardiovascular endurance, agility, and speed at 0.01 alpha level and a correlation for body composition, strength,

flexibility, coordination, and power at 0.05 level when the student-athletes engagement in conditioning training in terms of speed drills is paired with their development of physical fitness. This means that engaging in speed drills influences the majority of the components of physical fitness development as these drills improve the sports performance of student-athletes. Student-athletes excel in physical fitness and sports through speed drills as they are trained to be quick in immediately reacting or responding to their opponents or movements whenever engaged in sports competitions. On the other hand, it also reveals a negative correlation which emphasizes that speed drills must be influenced by great strength, proper body coordination, and balance which causes exhaustion and decreases the body composition in practicing the agility and speed of athletes, Wilson (2020).

When the student-athletes engagement in conditioning training in terms of agility drills is paired with their development of physical fitness, the obtained R-value reveals a significant relationship for cardiovascular endurance at 0.05 level. This means that engaging in agility drills influences cardiovascular endurance. Equally, Lennemann et al. (2013) found that agility training is effective in enhancing specific measures of physical and cognitive performance, such as cardiorespiratory fitness. On the other hand, it is also important to note that agility is influenced by many body compositions such as balance, strength, and even coordination. Therefore, it takes much toll on the cardiovascular endurance of the athletes causing much exhaustion (Wilson, 2020).

The student-athletes' engagement in conditioning training in terms of landing drills is also paired with their development of physical fitness. The generated R-values disclose a significant relationship for body composition, cardiovascular endurance, flexibility, and agility at 0.01 alpha level. This signifies that engaging in landing drills influences the majority of the components of physical fitness development as these drills are associated with high-ground reaction forces, athletes can improve their balance and increase

their cardiovascular endurance, flexibility, and agility to reduce injury prevalence; thus, contributing to their physical fitness as these drills affect accurate movement and body balance. Moreover, it is also important to note that it also reveals a negative correlation that emphasizes this component is not suitable for all forms of body composition and it can result in hyperventilation due to over-fatigue. Also, it tends to cause breaks in the tendons without proper execution which might influence agility, Foxley (2015).

In general, the table shows that when the junior high school athletes' level of engagement in conditioning training was correlated to their development of physical fitness, the generated R-values indicate a significant relationship among the tested variables at 0.01 level to 0.05 alpha level; thus, rejecting the null hypothesis implying that there is a significant relationship among the variables tested. This further signifies that the student-athletes' engagement in conditioning training affects the development of their physical fitness. A similar finding is noted in the study of Carvalho et al. (2019) asserting that introducing a strength and conditioning program can improve the physical fitness of students.

5. Proposed Program to Strengthen the Junior High School Athletes' Development of Physical Fitness through Conditioning Training

Strengthening the high engagement in conditioning training and maintaining excellent physical fitness development among junior high school athletes in Tanauan Integrated National High School requires clear objectives, training strategies, assessment techniques, monitoring, and evaluation that are incorporated in the proposed program. The program should emphasize the importance of each project component for the student-athletes understanding of what is needed for their physical fitness development.

To sustain student-athletes' development of physical fitness through conditioning training, a



program was conceptualized and proposed. This proposed program will be the key to the development of student-athletes in Tanauan City Integrated High School which can be a basis for all sports programs in the Schools Division of Tanauan City. It will include aero endurance exercises for cardiovascular progression. Also, it will contain the use of weight training for the upper and lower body to acquire strength in muscle groups needed for sport-specific movements.

The plyometric exercises will be put into emphasis for this athletic program. The use of explosive movement to strengthen the joints with tissues and muscles around it will be the key difference of this athletic program in developing elite athletes. Core Circuit Training and Agility Exercises will be covered as well for the total physical development of the student-athletes and to develop the athletes' game awareness, with their responsibilities and duties to the sport that they play, game-like situation practices will be incorporated into the program to train the mind and develop mental preparedness which is needed in most actual game situations.

CONCLUSIONS

The study focused on junior high school student-athletes who were primarily engaged in team sports and had been athletes for 4 to 5 years. The student-athletes were found to have normal Body Mass Index (BMI) and participated in competitions at the division level. The respondents were highly engaged in conditioning; and training, including plyometrics, foundational drills, warm-up drills, agility drills, and landing drills. The development of their physical fitness in terms of skill and health-related factors ranged from good to excellent, and their level of engagement in conditioning training had a significant influence on the development of their physical fitness.

RECOMMENDATION

Based on the study's results and conclusions, several recommendations were made. The Local Government Unit was advised to

implement an athletic program to further strengthen and develop the physical fitness and sports abilities of student-athletes. The Education Program Supervisor of Physical Education was encouraged to initiate curricular innovations to enrich the physical education activities that could help develop health-related and skill-related physical fitness. The Physical Education teachers and coaches were urged to revitalize the implementation of conditioning training and apply the proposed program's provisions to sustain the engagement of student-athletes in numerous sports training. Additionally, the respective coaches of the student-athletes were suggested to collaborate in developing programs and activities to strengthen the conduct of plyometrics in conditioning training in the city schools division. Lastly, student-athletes were encouraged to continue engaging in co-curricular and extra-curricular activities that might help strengthen their health-related and skill-related physical fitness.

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