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Original Article

THE CONTRIBUTION OF PARTICIPATION ON INDIVIDUAL SUCCESS IN SPORTS: EXAMINING THE IMPACT OF SPORTS PARTICIPATION ON PERFORMANCE OUTCOMES

A CONTRIBUIÇÃO DA PARTICIPAÇÃO NO SUCESSO INDIVIDUAL NOS ESPORTES: EXAMINANDO O IMPACTO DA PARTICIPAÇÃO ESPORTIVA NOS RESULTADOS DE DESEMPENHO

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RESUMO

A participação desportiva tem sido reconhecida há muito tempo como um contribuidor chave para o sucesso atlético, que é influenciado tanto pela aptidão física como pelos resultados de desempenho. No entanto, embora isto seja verdade, existem outros factores na participação desportiva, que são muito cruciais para o sucesso desportivo, entre eles estão: anos de participação desportiva activa, anos de experiência de treino, volume de treino e nível de competição, entre outros. Isto significa que compreender a relação entre os fatores é fundamental para otimizar o envolvimento desportivo e o desenvolvimento do atleta, particularmente em ambientes competitivos onde pequenas melhorias podem levar a vantagens significativas. Com base nisso, o presente estudo examina o impacto da participação esportiva nos resultados de desempenho de jogadores universitários de basquete nos quatro campi da Universidade Estadual de Mindanao, nas Filipinas. Quarenta e oito atletas universitários do sexo masculino foram entrevistados relativamente ao seu envolvimento desportivo, analisando os seus anos de participação desportiva ativa, anos de experiência de treino, volume de treino e nível de competição, e o seu desempenho no jogo foi analisado seguindo dados estatísticos notais. O estudo empregou um desenho descritivo quantitativo, analisando os dados usando Spearman rho para avaliar a força das relações. Os resultados revelaram que os jogadores com mais de 7 anos de participação ativa tiveram melhor desempenho ($r = 0,808$, $p = 0,000$), além disso, existe uma forte correlação positiva entre experiência de treinamento e desempenho ($r = 0,785$, $p = 0,000$). Descobriu-se também que o volume de treinamento influenciou positivamente o desempenho ($r = 0,621$, $p = 0,000$), enquanto níveis mais elevados de competição foram moderadamente associados à melhoria do desempenho ($r = 0,505$, $p = 0,000$). Entre os quatro factores, o número de anos de participação activa tem a correlação mais forte. Estes resultados sugerem que o envolvimento desportivo a longo prazo, treinos consistentes e exposição a competições de alto nível são essenciais para alcançar melhores resultados de desempenho atlético. Em conclusão, o estudo destaca a importância da participação desportiva sustentada, do treino regular e da exposição competitiva, especialmente nas universidades, para melhorar o desempenho atlético dos participantes. Diante disso, recomenda-se que treinadores, preparadores físicos, educadores físicos e desenvolvedores de programas esportivos incentivem o treinamento de longo prazo e a participação frequente em competições de alto nível. Porém, para melhores resultados, pesquisas futuras deverão investigar o papel dos fatores psicológicos e técnicos no desempenho esportivo.

Palavras-chave: Basquete filipino, programa de treinamento, desempenho, participação

ABSTRACT

Sports participation has long been recognized as a key contributor to athletic success, which is influenced by both physical fitness and performance outcomes. However, though, this is true, there are other factors in sports participation, which are very crucial for sports success among them are: years of active sport participation, years of training experience, training volume, and competition level, among others. This means that understanding the relationship between factors is critical for optimizing sports involvement and athlete development, particularly in competitive settings where small improvements can lead to significant advantages. Basing on this, the present study examines the impact of sports participation on the performance outcomes of college basketball players across the four campuses of Mindanao State University in the Philippines. Forty-eight males' university athletes were surveyed regarding their sports involvement, looking at their years of active sport participation, years of training experience, training volume and competition level, and their game performance was analyzed following notational statistics data. The study employed a quantitative descriptive design, analyzing the data using Spearman rho to assess the strength of the relationships. The findings revealed that players with over 7 years of active participation performed better ($r = 0.808$, $p = 0.000$), also, there is a strong positive correlation between training experience and performance ($r = 0.785$, $p = 0.000$). Training volume was also found to positively influenced performance ($r = 0.621$, $p = 0.000$), while higher competition levels were moderately associated with improved performance ($r = 0.505$, $p = 0.000$). Among the four factors, the number of years of active participation has the strongest correlation. These results suggest that long-term sports involvement, consistent trainings and exposure to high-level competition are essential for achieving better athletic performance outcomes. In

conclusion, the study highlights the importance of sustained sports participation, regular training, and competitive exposure, especially in universities, to enhance athletic performance of the participants. Upon this, it is recommended that coaches, trainers, physical educators and sports program developers should encourage long-term training and frequent participation in higher-level competitions. However, for better results, future researches should investigate the role of psychological and technical factors in sports performance.
Keywords: Philippine basketball, training program, performance, participation

Introduction

Sports participation is a fundamental aspect of athletic development, contributing significantly to both physical and psychological performance outcomes. Athletes who engage in structured sports activities not only enhance the physical endurance and strength[1] but has the potential to develop critical mental resilience needed for success in competitive environments[2]. Over the years, researchers have examined numerous factors that impacts athletic performance, including biomechanics, genetics, and psychological conditioning[3]. Meanwhile, in the study conducted by DiCesare et al. [4], they demonstrated the benefits of diversified sports involvement over early specialization as part of the impact of long-term sports participation on performance. However, much of this research is focused on early developmental stages, leaving unanswered questions about how these factors influence adult athletes' performance over time.

In this regard, there are other factors in sports participation, which are very crucial for sports success. The sports science community recognizes the importance of sports participation factors such as years of active involvement[5], training experience[6], training volume[7], and exposure to competition in determining performance[8]. According to Karacsony and Krupanszki[9], the motivational aspect of sports participation is more likely the reason to maintain their involvement over time which links with higher performance levels. In terms of training experiences, Root et al.[10], noted that engagement in multiple sports demonstrate better fitness and functional task performance compared to those who specialize early, supporting the notion that varied training can lead to improved performance outcomes. Likewise, Thuany et al.[11], emphasized that higher training commitment such as the increased weekly volume and frequency affects performance enhancement. Also, Gabbett[12] highlighted the delicate balance between training intensity and injury prevention, noting that higher training volumes often lead to better performance but at an increased risk of overuse injuries. Additionally, several studies investigated the relationship between training load and performance outcomes, however, they often focus on narrow aspects, such as nutrition[13] or psychological preparedness[14]. Furthermore, the competitive nature of sports environment plays a significant role in shaping athletes' performance. For instance, the presence of spectators, the significance of the event, and the level of competition can all influence an athlete's psychological state and, consequently, their performance[15]. Thus, these findings underscore the importance of understanding the relationship between factors as it is critical for optimizing sports involvement and athlete development, particularly in competitive settings where small improvements can lead to significant advantages.

Despite growing recognition of the factors influencing athletic performance, empirical studies directly linking sports participation with its four factors to measurable outcomes remain scarce. Existing research often isolates variables such as training frequency[16] or competitive pressure[17] without examining their combined effects on performance. This fragmented approach limits a holistic understanding of how sustained sports engagement, specifically years of active participation, training experience, training volume, and competitive exposure impact in shaping athletic success. Without a comprehensive analysis, training programs are risk of being developed based on incomplete evidence, potentially hindering athlete development.

To address this gap is crucial as the demand for data-driven coaching strategies continues to rise. Coaches, physical educators, and sports program developers require a deeper

understanding of how specific participation metrics translate into a better performance outcomes [18]. However, the lack of integrated research on these factors restricts the ability to design a more balanced training programs that optimize intensity, recovery, and long-term athletic growth. Therefore, a systematic investigation is necessary to determine which aspects of sports participation contribute most significantly to performance improvement, ensuring training methods are grounded in empirical evidence rather than assumptions.

Thus, this study aims to bridge the gap by empirically examining the relationship between key sports participation factors such as years of active participation, training experience, training volume, and competitive exposure and performance outcomes. To ensure an objective analysis, the study tests the null hypothesis (H_0), which assumes no significant relationship between sports participation factors and performance. With this, the findings will provide valuable insights for sports scientists, coaches, and trainers, supporting the development of evidence-based training programs that maximize athletic potential and promote sustained sports engagement.

Methods

Participants and Sampling Technique

The study was conducted in Mindanao State University System. Four campuses were involved which are all located in various places in Mindanao, Philippines. The study included only campuses with established varsity teams and responded to the request of participation. The campuses that were included are the following; MSU-Main, MSU-IIT, MSU-Maigo, and MSU-Sulu. The participants were male college students who were members of the men's basketball varsity teams at their respective campuses and were officially enrolled during the first semester of the 2023-2024 academic year. Using a total sampling technique, 48 male basketball players voluntarily took part in the study.

Instrument and Data Gathering Procedure

The study utilized the adapted questionnaire of Radovic et al.[19] to measure the sports participation of the athletes. The questionnaire was used to examine the following:

1. Kind of sport playing (individual, dual, team)
2. Membership in a sport club/association (yes or no)
3. Years of active sport participation
4. Training experiences (in years)
5. Training volume (number of training session per week) and
6. Participation in sport competitions (district, provincial, regional, national, international)

Based on the data collected from the questionnaire, several key criteria for sports participation were established. All participants were members of their respective varsity basketball team and had been involved in organized sports for at least one year. These participants were also members of official sports clubs or associations and had competed in sports events at various levels. The sports participation variables analysed in this study included: duration of involvement in sports (in years), frequency of participation in training sessions per week, and the competitive level of the events they participated in.

1. Active sports participation,
2. Training experience,
3. Training volume, and
4. Competition level

Whilst for the sports performance, the researcher allowed the participants to have an actual game performance. Each player's score of each skill performed was recorded through game notational statistics during their actual play and the FIBA scoresheet was utilized. The researcher used the individual statistical scores accumulated within the game of the athletes in the actual play to measure their sports performance. According to Nicolina et al.[20] basketball performance is one of the sports which is analysed through the use of notational analysis. In this study, the researcher adapted the performance effectiveness equation formulated by Heuzé et al.[21]. It analyses an individual's notational statistics to derive a total score of individual performance effectiveness as follows: Performance= (4 x successful 3-points shot + 3 x successful 2-points shot + 2 x successful free throws) – (number of 3-points shot attempted + number of 2-points shot attempted + number of free throw sots attempted) + (number of offensive rebound + number of defensive rebound + number of steals per game) – number of turnovers per game. A higher total score means a higher performance level of player. In order to interpret the result, the researcher created a scale range using the highest score minus lowest score divided by the 5 range[22].

To ensure the validity of the questionnaires, the researcher asked 3 expert validators for content validity check. The experts did the validation using a rating tool. Weighted mean was computed to determine if the item is to be retained, revised, or rejected. In this study, the sports participation questionnaire has a weighted mean of 2.93 which is verbally described as retained. According to Calmorin and Piedad[23], if a survey questionnaire has a weighted mean value ranges from 2.6 to 3, the item is retained. In addition, the panel of experts gave their suggestions for the improvement of the survey questionnaire. As for the reliability test of the research instrument for sports participation and personal development, the researcher conducted a pilot test to 30 basketball players who were excluded as respondents of the study. Using the IBM SPSS 26, the result of the reliability test for sports participation questionnaire is 0.710 Cronbach's Alpha which is interpreted as highly reliable. According to Wibawa[24], if the correlation coefficient value ranges from $0.70 \leq r \leq 0.90$ it is interpreted as high while, $0.90 \leq r \leq 1.00$ is interpreted as very high.

Prior to conducting the study, the researcher first obtained approval from the coach of each men's varsity basketball team. Once permission was granted, a final list of participants from each team was compiled. Following this, the researcher distributed consent letters to the participants, which included detailed instructions regarding the completion of the sports participation questionnaire. The questionnaire was collected securely and confidentially after they were completed by the participants. Once all participants had submitted their responses, the actual basketball games were held. During the games, the researcher video recorded the matches and systematically tallied each skill performed by the athletes. Afterward, the data from both the questionnaire and the game performance tallies were compiled and analysed for further interpretation.

Statistical analysis

The data collected in this study were analysed using various statistical methods to evaluate both sports participation factors and performance. Frequency and percentage distributions were applied to assess the patterns of sports participation and performance levels. To further analyse performance levels among basketball players, mean and standard deviation were calculated. Additionally, the Kolmogorov-Smirnov test was used to assess the normality of the data, while Levene's test was conducted to evaluate the homogeneity of variances across groups. To examine the relationship between sports participation, based on four key factors and player performance, the Spearman rho correlation was employed. This helped in identifying any significant associations between the variables.

Results

Based on the collected data, the study uncovered several key findings regarding the relationship between sports participation and the performance of the basketball players. The results of this study are the following:

Table 1. Distribution of players on sports participation factors

Sports Participation	Category	Frequency (n)	Percentage (%)
No. of Years Active in Sports	≤ 1 Year - 3 Years	15	31.30%
	4 Years - 6 Years	15	31.30%
	7 Years - ≥ 10 Years	18	37.50%
No. of Years of Training Experience	≤ 1 Year - 3 Years	17	35.40%
	4 Years - 6 Years	13	27.10%
	7 Years - ≥ 10 Years	18	37.50%
No. of Training Session per Week	1 – 2 Times	12	25.00%
	3 – 5 Times	21	43.80%
	6 – 7 Times	15	31.30%
Level of Sports Competition Played	District	4	8.30%
	Provincial	12	25.00%
	Regional	24	50.00%
	National	8	16.70%

Note: Frequency (*n*) represents the number of players in each category
Source: authors

Table 1 provides an overview of sports participation of the players. The highest percentage (37.50%) of players have been active in sports for at least 7 years or more, while a similar proportion (37.50%) have had extensive training experience of 7 years or more. In terms of training frequency, 43.80% of players train 3–5 times per week, indicating a moderate to high training commitment. Most players (50.00%) have competed at the regional level, with fewer reaching national-level competitions (16.70%). The result reflects the deep passion and commitment Filipinos have toward sports, with basketball at the forefront of this cultural enthusiasm.

Table 2. Distribution of players on performance

Performance Description	Frequency (n)	Percentage (%)
Excellent	2	4.2%
Very Good	16	33.3%
Good	9	18.8%
Fair	17	35.4%
Poor	4	8.3%
Total	48	100%

Note: Frequency (*n*) represents the number of players in each performance description
Source: Authors

As presented in Table 2, the majority of players (35.4%) exhibit fair performance and followed closely with players (33.3%), fall under the very good performance category. Additionally, players (18.8%) have demonstrated a good performance level, while (8.3%) players are categorized as having poor performance, and (4.2%) of players have achieved an excellent level of performance. These findings indicate that most players perform at a fair to very good level, with opportunities for improvement, particularly in increasing the number of players reaching the excellent category. The relatively low percentage of poor performers suggests that the majority are meeting at least a basic athletic standard.

Table 3. Descriptive statistics of performance of the players

	N	Minimum	Maximum	Mean	Standard Deviation (SD)	Performance Description
Sports Performance	48	7.00	25.00	12.6667	4.66920	Fair

Note: Performance description scale: 7 – 10 (Poor), 11 – 14 (Fair), 15 – 18 (Good), 19 - 22 (Very Good), 23 – 25 (Excellent)
Source: authors

Table 3 exemplifies the result of the descriptive statistics summarizing the sports performance of the basketball players. presents the mean distribution of the players which is verbally described as fair. The mean of 12.6667 with an SD of 4.666920 indicated that the overall sports performance of the players based on the predefined performance description, corresponds to a fair performance level. Overall, while there are a few high-performing athletes, the team averages a fair level of performance, which can be postulated that many players may need additional support or training to raise their level of play.

Table 4. Kolmogorov-Smirnov normality test for sports participation factors and performance

Variables		Kolmogorov-Smirnov[a]		
		Statistic	df	p-value
Sports Participation	No. of Years of Active Sport Participation	.244	48	.000
	No. of Years of Training Experience	.247	48	.000
	No. of Training Session per Week	.220	48	.000
	Level of Competition Played	.284	48	.000
Performance		.117	48	.096

Note: p-value > 0.05 (normally distributed), p-value ≤ 0.05 (not normally distributed)
Source: Authors

Table 4 presents the results of the Kolmogorov-Smirnov test, which was employed to determine whether the data on sports participation and performance variables follow a normal distribution. Based on the result, all sports participation factors have p-value of 0.000 which is lesser than the threshold value of 0.05, indicating that the data were not normally distributed. Meanwhile, the result for performance has a normal distribution with the p-value of 0.096 > 0.05. Given the non-normal distribution of the sports participation factors, the researcher used a non-parametric test specifically Spearman rho for further analysis.

Table 5. Test of homogeneity of variances between sports participation and performance

Variances		Lavene Statistic	df1	df2	p-value
Participation and Performance	No. of Years of Active Sport Participation and Performance	4.462	11	31	.000
	No. of Years of Training Experience and Performance	5.809	11	31	.001
	No. of Training Sessions per Week and Performance	2.721	11	31	.014
	Level of Sports Competition and Performance	1.676	11	31	.126

Source: authors

Table 5 presents the results of Levene's test for homogeneity of variances, evaluating whether the variance in sports participation factors is equal across performance. The analysis reveals that the number of years of active sports participation, training experience, and training

sessions per week exhibit significant variance differences as indicated by p-values<.05, suggesting that the assumption of homogeneity is not met, necessitating the use of non-parametric statistical approach. However, the level of sports competition satisfies the homogeneity assumption with a p-value >.05, making it appropriate for parametric statistical analysis. These results suggest that for the first three variables, statistical methods that assume equal variances may not be suitable, necessitating the use of non-parametric alternatives.

Table 6. Correlation between sports participation factors and performance

Variables	Performance (r)	-value	Decision
No. of Years Active in Sports Participation	.808	.000	Rejected
No. of Years of Training Experience	.785	.000	Rejected
No. of Training Session per Week	.621	.000	Rejected
Level of Sports Competition Played	.505	.000	Rejected

Note: Statistical significance at p <.05
Source: authors

Table 6 presents the correlation between key sports participation factors and performance outcomes, revealing statistically significant positive relationships across all variables (p=0.000). These findings indicate that as athletes accumulate more years of active sports participation, gain more training experience, engage in more training sessions per week, and compete at higher levels, their performance tends to improve. Among the examined factors, the number of years active in sports participation exhibited the strongest correlation with performance (r=0.808), followed closely by training experience (r=0.785). While the number of training sessions per week and the level of competition participated in also contribute to performance, their impacts are slightly less pronounced compared to the first two indicators. This suggests that long-term involvement in sports and consistent training contribute significantly to performance outcomes.

Discussion

This study aims to assess how sports participation affects performance outcomes among college basketball players across four campuses of Mindanao State University in Mindanao Philippines. Key findings indicate a direct correlation between years of active sports participation and improved player performance. PiŠOt et al.[25] explained that continued participation in sports over time from adolescence to adulthood leads to improve physical performance, including lower body mass index, faster running seeds, and better jumping ability, along with healthier lifestyle habits compared to non-athletes. Apart from that, extended sports involvement has been shown to enhance student-athletes' discipline and teamwork skills, driving them to achieve higher performance compared to their peers who are not engaged in sports[26].

Also, those that participates in sport over time have the opportunity to expand their life experiences, offering good opportunities for sports career [27]. These findings demonstrate that consistent sports participation benefits both physical health and psychological growth, enhancing overall player performance. According to Kim et al.[28], the involvement in sports over the span of time for instance until adulthood leads to various benefits such as reduced anxiety and stress level, as well as increased personal empowerment to name a few. Having that mentioned, performance in sports can be affected, Oforeh et al. [29] noting that stress can lead to mental health disorders, performance slumps, and poorer outcomes. Players with longer active involvement in sports gain maximum physical and psychological benefits, resulting in improved performance compared to those who start participating later in life.

Furthermore, this study found a strong correlation between years of training experience and performance. Supporting research indicates that extended training, especially in elite academy settings, significantly boosts young athletes' performance, with long-term soccer training improving junior players' physical abilities over a three-year period[30].To specifically understand the interplay of training experience and performance, Staff et al. [31] reiterated that extensive sport-specific practice which includes the optimal progression of training volume to name a few, is necessary to stimulate sport-specific adaptive responses and the process of doing so will take relatively long years of dedicated training, and ultimately reach elite levels.

This simply means that longer training in a player's career helps develop essential skills, serving as a foundation for improved performance. Likewise, Haugen et al.[32] highlights that long-term performance development requires a systematic increase in training load over time, showing that extended training experience benefits players' performance. As performance is considerably influenced of several factors, these factors may impede or help increase their performance. As what Masrun et al.[33] have stated that sports achievement such that the level of performance is shaped by a range of factors, including physical, technical, tactical, and psychological elements. Thus, top level performance obtained through training over a period of time while increasing the training load [34].

Moreover, when it comes to the training volume and performance, there is a correlation between these variables. In sports landscape, it highlighted that exercise and physical skills training are important means to improve in a competitive sport, thereby becoming a key to achieving good result in the game[35]. That is why, the primary aim of sports training is performance enhancement which is typically achieved by adjusting physical training loads, including changes in volume and intensity [36].

To prove, a study was conducted by Washif et al.[37], where it was found out that soccer players who maintained a weekly training volume of approximately 380 minutes (4-5 sessions per week) demonstrated notable improvements in their physical capabilities, suggesting that consistent and prolonged training sessions contribute to better performance outcomes. Parallel to this findings, Prokopczyk and Sokołowski[38], found out that athletes who engaged in longer training sessions exhibited better recovery profiles, which is essential for maintaining performance levels during competitive events. Thus, the players who maintain enough volume and not excessive sports training most likely have a better performance.

In addition, the level of competition is directly related to the performance of basketball players. Being exposed to different competitions, much in higher level of sports competition, encourages athletes to achieve optimal performance. For instance, Chen[8] revealed that a competitive environment enhances arousal levels, motivating athletes to exceed their limits and improve performance, especially in combat sports where it boosts self-control and overall outcomes. While higher levels of competition may increase anxiety, studies show that elite athletes experience less competitive anxiety than non-elite athletes, indicating that experience in high-pressure environments improves stress management[39]. Although higher-level competitions can increase anxiety, the experience helps athletes manage stress, enhances self-control, and pushes them to exceed their limits, leading to improved performance outcomes.

Overall, sports participation factors have a direct impact to performance, however, the strongest factor that influences performance outcomes is the number of years of active sport participation. According to Sinha[40], sports participation helps individuals develop and enhance motor skills, which are essential for successfully performing a wide range of physical activities including sports throughout life. If it is in a long-term basis, participating in sports improves physical fitness, especially endurance, higher level of muscular strength and cardiorespiratory fitness which are critical factors to an improved performance overall[41].

Integrating sustainable sports participation and performance goals into school sports programs requires a structured framework that positions coaches, trainers, and educators as

facilitators of both athletic and academic growth. They play a vital role by emphasizing long-term development, fostering consistent engagement, and implementing structured training to encourage sustained involvement in sports. Research highlights that sustained participation and increased training volume positively impact athletic performance[25,37,38.] To achieve this, coaches should develop individualized training plans that balance physical development with skill acquisition, ensuring these plans fit within student-athletes' schedules both academically and in training. Incorporating elements such as strength, endurance, and technical training in a designated time or duration, not only enhances athletic abilities but also fosters cognitive growth, as engagement in sports promotes discipline and time management skills which qualities that translate into academic and sports success[42].

Physical education teachers also play a vital role in this integration by fostering a supportive learning environment in their PE classes that acknowledges physical activity as a contributor to cognitive enhancement[43]. Teachers can collaborate with coaches to create flexible academic programs that allow student-athletes to meet both academic and athletic demands. Studies have shown that sports participation can reduce stress and anxiety while promoting mental well-being, which subsequently leads to improved academic and sports performance outcomes[39]. By working together, educators and coaches can ensure that student-athletes excel in both fields without compromising one for the other.

Lastly, a holistic framework of which 3Ps (performance, participation, and personal development) as proposed by Côté and Hancock[44] is intended can be considered for utilization among coaches, PE teachers, and sport program developers that incorporates a holistic approach suited for this integration. The framework should balance physical education, classroom learning, and extracurricular sports, fostering collaboration among teachers, coaches, and trainers. This can create interdisciplinary curricula that connect sports skills like teamwork, perseverance, and problem-solving directly to performance goals. This approach is supported by research that stresses the importance of consistent, structured sports participation in enhancing both physical and mental performance[11,41]. Educational institutions can integrate sports into training frameworks, reinforcing physical activity's value and promoting sustained participation for enhanced performance.

Conclusion

This study examined the impact of sports participation on performance outcomes. Based on the findings, it can be concluded that sports participation with factors, years of active sport participation, training experiences, frequency and level of competition played has a direct influence on the performance outcomes of the athletes. Among the four factors of sports participation, the years of active sports participation has the strongest impact in improving performance, suggesting that it is the primary step toward consistent, long-term engagement in various sport activities which is fundamental for developing and maintaining athletic capabilities. Overall, consistent sports participation provides players with numerous opportunities to refine their skills, improve physical fitness, and gain valuable experience which increases performance outcomes. On one hand, it can be suggested that sports training programs in schools should be intentionally structured to encourage greater sports participation and continuously designed to promote long-term athletic development, leading to improved performance. On the other hand, the study has some limitations that need to be taken into consideration. The study is limited to male basketball varsity athletes at MSU campuses in Mindanao, Philippines, thus the findings of the study may not fully generalize the other regions as well as other higher education institutions in the country, other sports and in a global scale. Also, it did not take important technical and psychological aspects into account, limiting the generalization of the results. In this regard, future studies could explore psychological and

technical factors to broaden understanding, and also extend research to other sports and age groups. In conclusion, the study contributes to the existing body of knowledge and helps address the inadequate research on this topic.

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