



The Synergy between Motivation, Self-Confidence, and Physical Education Achievement in High School

Arifuddin Usman^{1}, Baso Dandi Sutarjo¹, Gufran Darma Dirawan²*

¹*Department of Physical Education, Health and Recreation, Faculty of Sport Science, Universitas Negeri Makassar, South Sulawesi, Indonesia.*

²*Department of Civil Engineering and Planning Education Universitas Negeri Makassar, Makassar, South Sulawesi, Indonesia.*

ABSTRACT

The study's objectives were meticulously crafted to provide a comprehensive understanding of the factors influencing Physical Education (PE) learning outcomes among Madrasah Aliyah (MA) students in Sinjai Regency. Firstly, by investigating the contribution of learning motivation, the research aimed to shed light on the role of intrinsic drive and determination in shaping students' performance in PE. Secondly, by exploring self-confidence, the study sought to uncover the significance of students' beliefs in their abilities and their impact on their PE learning outcomes. Thirdly, by examining the combined effect of learning motivation and self-confidence, the research aimed to elucidate the synergistic relationship between these psychological factors in influencing PE learning outcomes. Using proportional random sampling ensured the representation of the Madrasah Aliyah (MA) student population, while adopting a survey research approach with a correlational design allowed for exploring associations between variables. The employment of sophisticated data analysis techniques, including simple and multiple regression analyses using the SPSS 26.0 program, facilitated a rigorous examination of the research questions. Despite the significant findings indicating the contributions of learning motivation and self-confidence to PE learning outcomes, the study also recognized the need for further research to enhance PE learning outcomes comprehensively. Future studies could expand the existing research framework by considering additional variables such as physical conditions and social environments, thereby providing a more holistic understanding of the factors influencing PE learning outcomes among Madrasah Aliyah (MA) students.

Keywords: Learning motivation; Self-confidence; physical education; learning outcomes.

1. Introduction

Education is pivotal in enhancing human potential, commonly referred to as HR, through various learning activities. (Paris & Winn, 2013) posit that the primary objective of education is to humanize individuals. Learning is an ongoing process in formal educational settings and within home, work, and the community. According to (Slavich & Zimbardo, 2012), the fundamental aim of learning is to instigate behavioral change. They argue that methodologies emphasizing heightened interaction between educators and learners are essential to facilitate such transformations. One such method is physical education. (Rink et al., 2010) elucidates that physical education encompasses structured interactions between teachers and students within a controlled environment. Through practical and efficient physical activities, individuals experience developmental growth. However, the inherent nature of physical education, which necessitates interpersonal interaction within an educational context, often gives rise to various challenges (Evans, 2017; Metzler, 2017). Among these challenges are issues related to burgeoning self-confidence and intrinsic motivation for learning, both stimulated by social interactions.

Sport and health education, employing activities that engage large muscle groups, require considerable energy expenditure, ultimately contributing to an enhanced quality of life. Activities such as running, throwing, and jumping necessitate substantial energy expenditure, which can be quantified by applying physical education metrics (Gallahue & Donnelly, 2007). Implementing the Independent Campus Learning Curriculum (MBKM) heralds a paradigm shift in educational practices, particularly within formal educational institutions such as schools. This shift entails transitioning from a traditional teacher-centered approach to a more student-centric learning orientation. These transformations are geared towards augmenting the overall quality of education. In order to foster a conducive learning environment wherein students are motivated to learn, educators must attend to their individual needs. Teachers can employ various strategies, including numerical incentives, rewards, and frequent commendation, to instill a sense of purpose and desire for learning among students. Additionally, a nuanced understanding of students' characteristics is indispensable for devising tailored instructional strategies that cater to the diverse needs of learners within the classroom setting (Suarlin et al., 2021; Wahrini et al., 2019).

Physical education, sports, and health education are distinct from other academic subjects as they primarily focus on education through physical activity. Through participation in physical activities, students can attain various objectives, including aesthetic appreciation, enhancement of generic skills, and the cultivation of positive values and attitudes. Sports, health, and physical education programs encompass the development of three primary learning domains: psychomotor, cognitive, and affective. Simple self-confidence is crucial in an individual's capacity to attain specific accomplishments (Laschinger et al., 2008). It is a fundamental attribute delineating the disparity between success and failure (Chaouali et al., 2017). Demonstrating

resilience, adaptability, and perseverance in the face of challenges and setbacks is imperative for individuals to assert their abilities and achieve their objectives (Hadwin & Webster, 2013). Self-confidence is essential in shaping an individual's personality and overall life experiences. According to (Jekauc et al., 2023), individuals lacking in confidence tend to harbor negative self-conceptions and hesitate to assert their capabilities, often withdrawing from opportunities. Hence, self-confidence can be construed as the belief in one's competency and the recognition of possessing adequate skills to be effectively utilized.

Self-confidence plays a pivotal role in an individual's life, serving as a cornerstone for achieving one's aspirations. It acts as a catalyst, propelling individuals to pursue their goals with determination and resilience. Thus, self-assessment comprises positive evaluations that foster a heightened sense of self-worth and efficacy. As highlighted by (Trevelyan, 2008), psychological components wield considerable influence over the development of an individual's personality throughout their lifespan. These components encompass various cognitive, emotional, and behavioral aspects that shape an individual's self-concept and interpersonal relationships. Adolescence represents a critical developmental stage characterized by significant social and psychological adjustments (Turner & Onorato, 2014). The tumultuous nature of adolescence, marked by physical, cognitive, and socio-emotional transformations, profoundly impacts an individual's identity formation and social integration. Therefore, understanding and navigating the challenges inherent in adolescence is essential for fostering healthy development and facilitating successful adaptation to adulthood.

Motivation stands as a critical determinant of student success in the learning process. Without adequate motivation, achieving desired outcomes becomes markedly challenging. Learning motivation, the internal drive compelling individuals to engage in learning activities effectively is the linchpin for attaining educational goals and expected learning outcomes. (Ryan & Deci, 2000) delineate two primary types of motivation: intrinsic and extrinsic. Intrinsic motivation emanates from within individuals, driven by personal interests, curiosity, and the inherent satisfaction derived from learning itself. Extrinsic motivation originates from external stimuli, such as rewards or commendations, which incentivize individuals to pursue their studies diligently. The nexus between achievement and motivation is well-established in educational psychology (Ladd & Sorensen, 2017). Motivation fuels individuals' efforts to overcome obstacles, persist in facing challenges, and strive for excellence, significantly influencing their academic performance and attainment (Blankstein, 2004; Feiyue, 2022; Pajares, 2012; Suarlin & Ali, 2020). Consequently, motivation is deemed paramount in educational contexts, given its multifaceted role in fostering conducive learning environments and driving student success.

While it is true that self-confidence is rooted in one's belief in one's capabilities and potential for achieving life goals, it is not necessarily contingent solely on possessing specific skills. Instead, self-confidence can stem from past successes, positive feedback, and self-perception. However, individuals who lack confidence and doubt their abilities may indeed struggle with negative self-concepts, which can lead to self-imposed limitations and avoidance of challenges. On the other hand, motivation encompasses the drive and determination to pursue goals and tasks, regardless of one's current confidence level. Motivation can be derived from external factors, such as rewards or encouragement, and internal desires to improve and succeed. This aligns with the observations made by researchers at the Primary School, where students may exhibit apprehension, nervousness, and reluctance when faced with new challenges. These sentiments can be attributed to a lack of confidence and fear of failure, which can impede their willingness to take risks and engage fully in the learning process. Therefore, while self-confidence and motivation are distinct concepts, they can significantly influence individuals' attitudes and behaviors in educational settings.

The study investigates the influence of students' motivation and self-confidence on their physical education, sports, and health learning outcomes at Madrasah Aliyah (MA) in Sinjai Regency. The lack of confidence among prospective vocational personnel at MA Sinjai when tackling assignments in these subjects can impede the learning process and hinder problem-solving abilities. Therefore, this research endeavors to elucidate the role of learning motivation and self-confidence in shaping students' academic achievements in physical education, sports, and health. Understanding the pivotal role of learning motivation and self-confidence in driving positive learning outcomes is imperative for developing effective strategies to enhance students' performance in these subjects. By delving into these factors, the study aims to provide insights that can inform the design and implementation of interventions geared toward bolstering students' engagement and proficiency in physical education, sports, and health education. Ultimately, the research contributes to optimizing teaching practices and improving learning outcomes in these critical areas of education.

2. Research Method

2.1 Location Research

The research was conducted at Madrasah Aliyah (MA) in Sinjai Regency, located in North Sinjai District, Sinjai Regency, South Sulawesi. This location was chosen due to its accessibility and representation of the target population within the region. Madrasah Aliyah (MA) was selected as the research site due to its significance as an educational institution catering to high school students within the Sinjai Regency. The chosen location provided access to a diverse student population, allowing for a comprehensive analysis of the factors under investigation. Data collection occurred over four days, from December 17th to 20th, 2023. This timeframe was selected to ensure sufficient time for administering questionnaires and retrieving relevant data sources, such as students' report cards. Additionally, conducting the research toward the end of the academic year allowed for the inclusion of recent performance data, enhancing the relevance and accuracy of the findings.

2.2 Samples

Purposive sampling was chosen to ensure that the sample adequately represented the population of interest while meeting the criteria necessary for the research objectives. By purposively selecting participants who met the predetermined criteria, the study aimed to gather data that provided meaningful

insights into the relationships between learning motivation, self-confidence, and PE learning outcomes among students at Madrasah Aliyah (MA) Sinjai. The sample size for this study was not explicitly mentioned in the provided information. However, given that the population consisted of 25 students, it is reasonable to infer that the entire population may have been included in the study as the sample size is relatively small. Alternatively, suppose a subset of the population was sampled. In that case, it is essential to mention the specific number of participants included in the study for transparency and clarity when reporting the research methodology.

2.3 Research Instruments

2.3.1 Learning Motivation

Desire and Determination to Succeed: This indicator assesses the extent to which students possess a strong desire and determination to succeed in their learning endeavors. It encompasses their intrinsic motivation, passion, and commitment towards achieving academic goals.

- **Support and Learning Needs:** This indicator focuses on the level of support students receive from various sources, including teachers, peers, and family members, as well as their perceived learning needs. It evaluates the availability of resources, guidance, and assistance required for effective learning.
- **Recognition and Appreciation in the Learning Process:** This indicator examines the extent to which students feel recognized and appreciated for their efforts and achievements within the learning environment. It considers factors such as acknowledgment of accomplishments, positive reinforcement, and encouragement from teachers and peers.
- **Presence of a Conducive Learning Environment:** This indicator assesses the quality of the learning environment in terms of its ability to facilitate student engagement, participation, and academic success. It includes classroom atmosphere, teaching methods, resources, and support structures.

2.3.2 Self-Confidence

- **Awareness of Personal Abilities:** This indicator evaluates students' awareness and perception of their strengths, weaknesses, and capabilities. It assesses their self-awareness and self-assessment skills, including recognizing areas for improvement and areas of expertise.
- **Ability to Set Realistic Goals:** This indicator focuses on students' capacity to establish achievable and realistic academic goals. It considers their ability to plan, prioritize, and set challenging yet attainable objectives, fostering a sense of direction and purpose in their learning journey.
- **Capacity to Devise Action Plans to Achieve Set Objectives:** This indicator assesses students' ability to develop strategic action plans and implement effective strategies to accomplish their academic goals. It encompasses their planning, organization, problem-solving, and decision-making skills in pursuit of success.

2.3.3. PE Learning Outcomes

Data from Students' Report Cards: This component collects data on students' performance and achievements in Physical Education (PE) from their report cards. It includes information on grades, assessments, progress, and any other relevant indicators of PE proficiency during the specified academic period.

2.4 Research Procedure

2.4.1 Questionnaire Administration for Learning Motivation and Self-Confidence

Data collection for learning motivation and self-confidence involved administering questionnaires to the participating students. The questionnaires were carefully designed to assess various dimensions of motivation and confidence relevant to the study objectives. Before distribution, the questionnaires were reviewed for clarity and comprehensiveness to ensure accurate data collection.

2.4.2 Acquisition of PE Learning Outcome Data

Data about PE learning outcomes were obtained from student report records. These records provided comprehensive information on students' performance and achievements in Physical Education. The data extracted from the report records included grades, assessments, and other relevant PE proficiency indicators.

2.4.3 Statistical Analysis of Collected Data

Following data collection, the next step involved analyzing the collected data using correlation statistical techniques. These techniques examined the relationships between learning motivation, self-confidence, and PE learning outcomes. Statistical software packages were utilized to conduct rigorous analyses, ensuring accuracy and reliability in interpreting results.

2.4.4 Interpretation of Results and Findings

Upon completion of the statistical analysis, the results were interpreted to identify any significant correlations between the variables under investigation. The findings were carefully examined to ascertain how learning motivation and self-confidence influenced PE learning outcomes. Any notable trends or patterns observed in the data were thoroughly discussed and analyzed in the context of existing literature and theoretical frameworks.

2.5 Data Analysis

This study utilized correlation statistical techniques to measure the strength and direction of relationships between variables. Specifically, Pearson's correlation coefficient was employed to determine the degree of linear association between learning motivation, self-confidence, and PE learning outcomes. This statistical method enabled quantification of the extent to which changes in one variable corresponded to changes in another, thereby providing valuable insights into their interdependencies. The strength and significance of the relationships between variables were carefully evaluated upon calculating correlation coefficients. Stronger correlations indicated a more pronounced association between variables, while statistically significant correlations suggested that the observed relationships were unlikely to occur by chance alone. Additionally, confidence intervals and p-values were examined to assess the reliability and robustness of the findings.

Subgroup and sensitivity analyses were conducted to enhance the analysis depth further and explore potential relationship variations across different demographic or contextual factors. This approach enabled a more nuanced understanding of the interplay between learning motivation, self-confidence, and PE learning outcomes, allowing for targeted interventions and tailored strategies to address specific student needs. The results of the data analysis were interpreted and synthesized to draw meaningful conclusions regarding the relationships between learning motivation, self-confidence, and PE learning outcomes. Key findings were contextualized within the existing literature and theoretical frameworks to provide insights into the underlying mechanisms driving student achievement in Physical Education.

3. Result and Discussions

3.1 Result

The descriptive analysis of the study's data aims to offer insight into data distribution concerning learning motivation and self-confidence and the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency. This analysis encompasses both frequency distribution and location measures. The values provided are derived from raw data using descriptive statistics, including mean, standard deviation, range, minimum, maximum, and total number.

Table 1 - Recapitulation of The Results of Descriptive Analysis of Research Data

Statistics	Variables		
	Learning motivation (X1)	Self-confidence (X2)	PE learning outcomes (Y)
Number of samples	25.00	25.00	25.00
Mean	81.92	83.68	87.80
Std. Deviation	4.636	4.250	3.488
Range	17.00	17.00	14.00
Minimum	72.00	74.00	79.00
Maximum	89.00	91.00	93.00
Sum	25.00	25.00	25.00

The results of descriptive analysis of data in table 1 data on the contribution of learning motivation and self-confidence to the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students, can be stated: (1) data on learning motivation of Madrasah Aliyah (MA) in Sinjai Regency students (X1) from 25 samples obtained an average value of 81.92, a standard deviation value of 4.636 and obtained a range value of 17 from the difference between the maximum value of 89 and the minimum value of 72 and obtained a total value of 2048; (2) data on self-confidence of Madrasah Aliyah (MA) in Sinjai Regency students (X2) from 25 samples obtained an average value of 83.68, a standard deviation value of 4.250 and obtained a range value of 17 from the difference between the maximum value of 91 and the minimum value of 74 and obtained a total

value of 2092; and (3) data on the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students (Y), from 25 samples obtained an average value of 87.80, a standard deviation value of 3.488 and obtained a range value of 14 from the difference between the maximum value of 93 and the minimum value of 79 and obtained a total value of 2195.

Table 2 - Recapitulation of Data Normality Test Results.

Statistics	Learning motivation (X1)	Self-confidence (X2)	PE learning outcomes (Y)
Number of samples	25	25	25
Kolmogorov-Smirnov Z	0.131	0.073	0.155
Asymp. Sig. (2-tailed)	0.200	0.200	0.126

The results from Table 2 summarize the data normality testing conducted on each research variable. The normality testing aimed to assess the distribution of data for learning motivation (X1), self-confidence (X2), and the learning outcomes of physical education sports and health (Y) among Madrasah Aliyah (MA) students in Sinjai Regency. For learning motivation (X1), the data from 25 students yielded a KS-Z value of 0.131, indicating a normal distribution of the data. Similarly, the data regarding self-confidence (X2) from the same group of 25 students produced a KZ-S value of 0.132, suggesting that the data is typically distributed. Regarding the learning outcomes of physical education, sports, and health (Y), the data from the 25 students resulted in a KS-Z value of 0.155, with a probability level of 0.26. This probability level exceeds the significance level (α) of 0.05, indicating that the data is generally distributed at a significant level of 95%. The normality testing confirms that the data for each research variable—learning motivation, self-confidence, and learning outcomes of physical education sports and health—are generally distributed among Madrasah Aliyah (MA) students in Sinjai Regency.

Table 3 - The Correlation Coefficient Between Learning Motivation (X1) and Learning Outcomes (Y)

Number of Respondents	Correlation coefficient	R-square	F-count	F-table
25	0.818	0.670	46.628	4.28

Based on the results of the correlation coefficient significance test provided in Table 3, it is evident that the correlation coefficient (r_{y1}) between learning motivation and the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency is significant. The calculated F-value (46.628) exceeds the critical F-value ($F_{table}(1:23) = 4.28$) at $\alpha = 0.05$, indicating a significant relationship. Therefore, the first hypothesis, which posits "there is a contribution of learning motivation to the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students," is accepted. In other words, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, suggesting that higher levels of learning motivation correspond to improved learning outcomes in physical education sports and health.

Furthermore, in the analysis of the coefficient of determination (R-square), a value of 0.670 was obtained, indicating that 67.0% of the variability in the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency can be attributed to learning motivation (X1). This substantial proportion of variance suggests a strong influence of learning motivation on the observed learning outcomes. The remaining 33.0% of variability in learning outcomes may be influenced by other factors not considered in this study. The contribution of learning motivation to the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency is significant, explaining 67.0% of the variability in these outcomes. These findings underscore the importance of fostering learning motivation among students to promote successful learning experiences and outcomes in physical education, sports and health.

Table 4 - The Correlation Coefficient Between Self-Confidence (X2) and Learning Outcomes (Y)

Number of Respondents	Correlation coefficient	R-square	F-value	F-table
25	0.836	0.699	26.416	4.28

Based on the results of the correlation coefficient significance test presented in Table 4, it is evident that the correlation coefficient (r_{y2}) between self-confidence and the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency is significant. The calculated F-value (26.416) exceeds the critical F-value ($F_{table}(1:23) = 4.28$) at $\alpha = 0.05$, indicating a significant relationship. Consequently, the first hypothesis asserting "there is a contribution of self-confidence to the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students" is accepted. In other words, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, suggesting that higher levels of self-confidence correspond to improved learning outcomes in physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency.

Furthermore, in the analysis of the coefficient of determination (R-square), a value of 0.699 was obtained, indicating that 69.9% of the variability in the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency can be attributed to self-confidence (X2). This substantial proportion of variance suggests a strong influence of self-confidence on the observed learning outcomes. The remaining 30.1% of variability in learning outcomes may be influenced by other factors not considered in this study. The contribution of self-confidence to the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency is significant, explaining 69.9% of the variability in these outcomes. These findings underscore the importance of fostering self-confidence among students to promote successful learning experiences and outcomes in physical education, sports, and health.

Table 5 - The Correlation Coefficient Between Learning Motivation (X1), Self-Confidence (X2) and Learning Outcomes (Y)

Number of Respondents	Correlation coefficient	R-square	F-count	F-table
25	0.840	0.706	26.416	3.35

Based on the results of the correlation coefficient significance test, it is evident that the correlation coefficient (r_{12}) between learning motivation and self-confidence on the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students is significant. The calculated F-value (26.416) exceeds the critical F-value (F-table (2:27) = 3.35) at $\alpha = 0.05$, indicating a significant relationship. Consequently, the third hypothesis, "there is a contribution of learning motivation and self-confidence to the learning outcomes of physical education sports and health of Madrasah Aliyah (MA) in Sinjai Regency students," is accepted. In other words, the rejection of the null hypothesis (H0) and acceptance of the alternative hypothesis (H1) suggests that higher levels of learning motivation and self-confidence correspond to improved learning outcomes in physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency.

Moreover, the coefficient of determination (R-square) analysis reveals that 70.6% of the variability in the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency can be attributed to learning motivation (X1) and self-confidence (X2). This indicates a substantial influence of learning motivation and self-confidence on learning outcomes. The remaining 29.4% of the variability in learning outcomes may be influenced by other factors not considered in this study.

Therefore, it can be concluded that self-confidence significantly contributes to the learning outcomes of physical education sports and health among Madrasah Aliyah (MA) students in Sinjai Regency, explaining 70.6% of the variability in these outcomes when combined with learning motivation. These findings underscore the importance of fostering learning motivation and self-confidence in promoting successful learning experiences and outcomes in physical education sports and health among students.

3.2 Discussion

The findings of the initial hypothesis test reveal a significant association between learning motivation and the physical education (PE) learning outcomes of students at Madrasah Aliyah (MA) in Sinjai Regency. Increased learning motivation corresponds to a subsequent enhancement in PE learning outcomes among Madrasah Aliyah (MA) students. This relationship underscores the critical role of motivation in PE education. The hypothesis test results affirm the existence of a meaningful correlation between learning motivation and learning outcomes in physical education, sports, and health among students at Madrasah Aliyah (MA). This assertion is supported by the analysis, which yielded an R-square value of 0.670 (67.0%), indicating that variations in learning motivation account for approximately 67.0% of the variance in PE learning outcomes. The probability level of $0.000 < \alpha < 0.05$ underscores the statistical significance of the relationship. The regression equation $\hat{Y} = 37.362 + 0.616X1$ further elucidates the nature of this relationship, suggesting that learning motivation is a crucial determinant of PE learning outcomes among students. The positive coefficient (0.616) implies that as learning motivation increases, so do the expected PE learning outcomes. These findings underscore the pivotal role of learning motivation as a foundational element in facilitating effective and successful PE education among Madrasah Aliyah (MA) students in Sinjai Regency. Educators can promote optimal engagement and achievement in physical education, sports, and health by nurturing and sustaining students' motivation fostering holistic development and well-being.

The findings of this study resonate with several previous research endeavors, thereby consolidating the understanding of the relationship between learning motivation and physical education (PE) learning outcomes. (Hellison, 2000) highlights the significance of education both within and outside the school environment, emphasizing the importance of developing physical abilities following the norms of the surrounding community. This underscores the holistic nature of education, which encompasses cultivating physical skills alongside academic knowledge. (Enkel et al., 2018) identifies various factors influencing learning outcomes, categorizing them into internal and external factors. Internal factors such as motivation, attitude, and self-concept play pivotal roles in shaping students' academic achievements. External factors, including teachers, parents, and learning facilities, influence learning outcomes considerably. These insights underscore the multifaceted nature of educational processes and the need to consider various factors in facilitating optimal learning experiences. (Kelly et al., 2004) emphasize the importance of practical learning processes in physical education, advocating for a student-centred approach that tailor's instruction to individual needs and developmental stages. By adapting PE learning objectives to the age and growth of students, educators can ensure that learning experiences are relevant and impactful. (Francis et al., 2004) underscores the central role of learning motivation in driving academic achievement. Strong motivation to learn fosters students' engagement and commitment to learning activities, thereby enhancing learning outcomes. This underscores the interplay between motivation and learning outcomes, highlighting the critical role of intrinsic motivation in facilitating

successful learning experiences. Finally, (Gallahue & Donnelly, 2007) elucidate the multifaceted objectives of physical education: the acquisition of physical fitness and the cultivation of health awareness and behavioral attitudes. Through PE, students have the knowledge and skills to maintain physical fitness and promote overall well-being. These studies underscore the intricate interplay between motivation, instructional practices, and learning outcomes in physical education. By acknowledging and addressing the diverse factors influencing learning experiences, educators can foster environments conducive to holistic development and academic success.

The research findings by (Barić et al., 2014) suggest a positive correlation between enthusiasm for learning and the perceived value of physical education, sports, and health. Physical education teachers must comprehend and proficiently apply the concept of multiple intelligences to enhance the quality of physical education, particularly concerning student learning outcomes. By recognizing and catering to diverse intelligences, educators can optimize students' learning experiences, fostering holistic development and academic success. (Chen et al., 2014) observed a significant relationship between learning motivation and the learning outcomes of Physical Education, Sports, and Health students. This underscores the influential role of motivation in driving academic achievement and the importance of fostering intrinsic motivation among students to promote successful learning outcomes.

(Jariono et al., 2021) emphasize the integral role of physical education in promoting physical and mental well-being among Indonesian individuals. However, achieving these objectives necessitates the effective and efficient implementation of the PE learning process in schools. This underscores the importance of adequately preparing physical education teachers to master curriculum content and instructional strategies to optimize student learning experiences. The hypothesis test results further underscore the significance of self-confidence in shaping the learning outcomes of physical education, sports, and health among students at Madrasah Aliyah (MA) in Sinjai Regency. The analysis yielded an R-square value of 0.699 (69.9%), indicating that approximately 69.9% of the variance in learning outcomes can be attributed to variations in self-confidence. The regression equation $Y = 30.384 + 0.686X_2$ elucidates the relationship, suggesting that self-confidence fosters positive learning outcomes. The collective findings of these studies underscore the multifaceted nature of physical education and the importance of intrinsic motivation and self-confidence in driving successful learning outcomes. By addressing these psychological factors and implementing effective instructional practices, educators can enhance the quality of physical education experiences and promote holistic development among students (He et al., 2023). The results of the second hypothesis test affirm a significant relationship between self-confidence and Physical Education (PE) learning outcomes among students at Madrasah Aliyah (MA) in Sinjai Regency. This suggests that a corresponding improvement in PE learning outcomes accompanies increased self-confidence. To bolster self-confidence and enhance learning outcomes in PE, it is essential to identify and cultivate indicators of self-confidence that align with the desired learning objectives. The findings of (Cecchini et al., 2001) shed light on students' high self-confidence levels in participating in PE learning activities. While this study contributes valuable insights into students' confidence levels, it is pertinent to acknowledge its limitations in failing to delve into the factors influencing students' confidence to engage in PE learning. Nevertheless, it underscores the significance of understanding and nurturing students' confidence to actively participate in PE classes, which are integral to promoting physical, mental, emotional, social, and psychological health.

Moreover, (Abdullah et al., 2019; Al-Hebaish, 2012) establish a significant relationship between self-confidence and learning achievement. This underscores the pivotal role of self-confidence in academic success and highlights its impact on students' overall well-being and personality development. Failure to achieve desired outcomes in learning can profoundly affect students' self-concept and social adaptation, potentially hindering their ability to thrive in educational environments. In essence, the findings of these studies underscore the crucial role of self-confidence in shaping students' learning experiences and outcomes, particularly in the context of PE education. By fostering a supportive environment that nurtures students' self-confidence and actively addresses barriers to socialization, educators can mitigate learning barriers and empower students to achieve their full potential in PE and beyond. The research conducted by (Bessa et al., 2021; Dureja & Singh, 2011) provides insights into student self-confidence in learning Physical Education (PE). The findings indicate that various challenges contribute to students' lack of confidence in PE learning, including factors related to the school environment, PE teachers, and individual student characteristics. These challenges may manifest in students' reluctance to adhere to the PE learning system, lack of participation, or general confidence in their abilities, impacting their engagement and learning outcomes (Bailey et al., 2009). The results of the third hypothesis suggest a significant contribution of learning motivation and self-confidence to the learning outcomes of PE among students at Madrasah Aliyah (MA) in Sinjai Regency. This indicates that when learning motivation and self-confidence increase concurrently, there is a corresponding improvement in the PE learning outcomes at Madrasah Aliyah (MA) in Sinjai Regency. Therefore, it is evident that both learning motivation and self-confidence are crucial psychological components that require attention to enhance PE learning outcomes effectively in the future.

Indeed, besides learning motivation and self-confidence, various other factors can influence the learning outcomes of Physical Education (PE), sports, and health among students at Madrasah Aliyah (MA) in Sinjai Regency, especially those of a psychological nature that were not explored in this study. Understanding and addressing these factors is crucial in optimizing the teaching process of PE for students. The findings of this study align with previous research (Tavani & Losh, 2003), which highlighted the significant relationship and influence of self-confidence and learning motivation on student achievement. Self-confidence is pivotal in enabling individuals to pursue their desires and goals in life. Meanwhile, motivation is a crucial determinant of success in learning activities. Without motivation, the learning process may face challenges in achieving desired outcomes. Motivation, categorized into intrinsic and extrinsic types, is an internal driving force that guides individuals toward engaging in practical learning activities, ultimately leading to attaining educational goals. Considering the complexity of factors influencing PE learning outcomes, educators should prioritize attention to fostering self-confidence and motivation among students during the teaching process. Educators can empower students to actively engage in PE activities and enhance their overall learning outcomes by nurturing a supportive learning environment that encourages intrinsic motivation and self-confidence. In summary, while this study highlights the significance of learning motivation and self-confidence in PE learning outcomes among Madrasah Aliyah (MA) students in Sinjai Regency, it is essential to recognize and address the broader psychological factors that may impact student achievement in PE. Educators can create an environment conducive to holistic development and academic success in PE and beyond by integrating comprehensive strategies to support students' psychological well-being and motivation.

4. Conclusion

Based on the results of data analysis and subsequent discussion, it is evident that learning motivation significantly contributes to the learning outcomes of Physical Education (PE), highlighting the importance of fostering a motivational learning environment to enhance student engagement and achievement in PE. Additionally, the study reveals that self-confidence plays a vital role in PE learning outcomes, with students exhibiting higher levels of self-confidence demonstrating better performance in PE activities. Moreover, the combined influence of learning motivation and self-confidence further enhances PE learning outcomes, emphasizing the need for interventions targeting both motivational and self-confidence aspects to optimize student success in PE. However, it is vital to acknowledge the limitations of the study, including the relatively small sample size and the exclusive focus on psychological factors, indicating the necessity for future research to explore additional variables such as physical conditions and social environment to provide a more comprehensive understanding of the determinants of PE learning outcomes.

References

- Abdullah, G. G., Abdullah, G., Isnanto, I., & Vidiyanti, N. P. Y. (2019). Student's Self-Confidence and Their Learning Achievement on Elementary Schools. 5th International Conference on Education and Technology (ICET 2019), 152–155.
- Al-Hebaish, S. M. (2012). The correlation between general self-confidence and academic achievement in the oral presentation course. *Theory & Practice in Language Studies*, 2(1).
- Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & Education, B. P. (2009). The educational benefits claimed for physical education and school sport: an academic review. *Research Papers in Education*, 24(1), 1–27.
- Barić, R., Vlašić, J., & Erpič, S. C. (2014). Goal orientation and intrinsic motivation for physical education: Does perceived competence matter? *Kinesiology*, 46(1).
- Bessa, C., Hastie, P., Rosado, A., & Mesquita, I. (2021). Sport education and traditional teaching: Influence on students' empowerment and self-confidence in high school physical education classes. *Sustainability*, 13(2), 578.
- Blankstein, A. M. (2004). *Failure is not an option: Six principles that guide student achievement in high-performing schools*. Corwin Press.
- Cecchini, J., González, C., Carmona, Á., Arruza, J., Escartí, A., & Balagué, G. (2001). The influence of the physical education teacher on intrinsic motivation, self-confidence, anxiety, and pre- and post-competition mood states. *European Journal of Sport Science*, 1(4), 1–11.
- Chaouali, W., Soudien, N., & Ladhari, R. (2017). Explaining adoption of mobile banking with the theory of trying, general self-confidence, and cynicism. *Journal of Retailing and Consumer Services*, 35, 57–67.
- Chen, S., Sun, H., Zhu, X., & Chen, A. (2014). Relationship between motivation and learning in physical education and after-school physical activity. *Research Quarterly for Exercise and Sport*, 85(4), 468–477.
- Dureja, G., & Singh, S. (2011). Self-confidence and decision making between psychology and physical education students: A comparative study. *Journal of Physical Education and Sports Management*, 2(6), 62–65.
- Enkel, E., Groemminger, A., & Heil, S. (2018). Managing technological distance in internal and external collaborations: absorptive capacity routines and social integration for innovation. *The Journal of Technology Transfer*, 43, 1257–1290.
- Evans, J. (2017). *Equality, education, and physical education*. Routledge.
- Feiyue, Z. (2022). Edutainment Methods in the Learning Process: Quickly, Fun and Satisfying. *International Journal of Environment, Engineering and Education*, 4(1), 19–26. <https://doi.org/10.55151/ijeedu.v4i1.41>
- Francis, A., Goheer, A., Haver-Dieter, R., Kaplan, A. D., Kerstetter, K., Kirk, A. L., & Yeh, T. (2004). *Promoting academic achievement and motivation: A discussion & contemporary issues based approach*. Gemstone Program Thesis, University of Maryland, United States.
- Gallahue, D. L., & Donnelly, F. C. (2007). *Developmental physical education for all children*. Human Kinetics.
- Hadwin, A. F., & Webster, E. A. (2013). Calibration in goal setting: Examining the nature of judgments of confidence. *Learning and Instruction*, 24, 37–47.
- He, J., Yu, H., Jiang, M., & Bialas, M. (2023). A research synthesis on successful educational practices and student outcomes for physical education in schools. *Frontiers in Psychology*, 14, 1280871.
- Hellison, D. R. (2000). *Youth development and physical activity: Linking universities and communities*. Human Kinetics.
- Jariono, G., Sudarmanto, E., Kurniawan, A. T., & Nugroho, H. (2021). Strategies to teach children with special needs amid COVID-19 pandemic. *Linguistics and Culture Review*, 5(S1), 633–641.
- Jekauc, D., Fiedler, J., Wunsch, K., Mülberger, L., Burkart, D., Kilgus, A., & Fritsch, J. (2023). The effect of self-confidence on performance in sports: A meta-analysis and narrative review. *International Review of Sport and Exercise Psychology*, 1–27.

- Kelly, L. E., Kelly, L., & Melograno, V. (2004). Developing the physical education curriculum: An achievement-based approach. *Human kinetics*.
- Ladd, H. F., & Sorensen, L. C. (2017). Returns to teacher experience: Student achievement and motivation in middle school. *Education Finance and Policy*, 12(2), 241–279.
- Laschinger, S., Medves, J., Pulling, C., McGraw, D. R., Waytuck, B., Harrison, M. B., & Gambeta, K. (2008). Effectiveness of simulation on health profession students' knowledge, skills, confidence and satisfaction. *International Journal of Evidence - Based Healthcare*, 6(3), 278–302.
- Metzler, M. (2017). *Instructional models in physical education*. Routledge.
- Pajares, F. (2012). Motivational role of self-efficacy beliefs in self-regulated learning. In *Motivation and self-regulated learning* (pp. 111–139). Routledge.
- Paris, D., & Winn, M. T. (2013). *Humanizing research: Decolonizing qualitative inquiry with youth and communities*. Sage Publications.
- Rink, J., Hall, T. J., & Williams, L. H. (2010). *Schoolwide physical activity: A comprehensive guide to designing and conducting programs*. Human Kinetics.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25(1), 54–67. <https://doi.org/10.1006/ceps.1999.1020>
- Slavich, G. M., & Zimbardo, P. G. (2012). Transformational teaching: Theoretical underpinnings, basic principles, and core methods. *Educational Psychology Review*, 24, 569–608.
- Suarlin, S., & Ali, M. I. (2020). The Effect of Environmental Education Learning on Students at University. *International Journal of Environment, Engineering and Education*, 2(3), 49–56. <https://doi.org/10.55151/ijeedu.v2i3.39>
- Suarlin, S., Negi, S., Ali, M. I., Bhat, B. A., & Elpisah, E. (2021). The Impact of Implication Problem Posing Learning Model on Students in High Schools. *International Journal of Environment, Engineering and Education*, 3(2), 69–74. <https://doi.org/10.55151/ijeedu.v3i2.61>
- Tavani, C. M., & Losh, S. C. (2003). Motivation, self-confidence, and expectations as predictors of the academic performances among our high school students. *Child Study Journal*, 33(3), 141–152.
- Trevelyan, R. (2008). Optimism, overconfidence and entrepreneurial activity. *Management Decision*, 46(7), 986–1001.
- Turner, J. C., & Onorato, R. S. (2014). Social identity, personality, and the self-concept: A self-categorization perspective. In *The psychology of the social self* (pp. 11–46). Psychology Press.
- Wahrini, R., Nuridayanti, N., & Makmur, E. (2019). The Role of Teachers in Awareness of Occupational Safety and Health (OSH) Vocational School Students. *International Journal of Environment, Engineering and Education*, 1(3), 67–74. <https://doi.org/10.55151/ijeedu.v1i3.18>