



The impact of psychological factors on physical education learning outcomes

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Abstract

This study aims to analyze the impact of students' perceptions and learning motivation as the main factors influencing physical education learning outcomes. Affective learning has been reported as a key factor in achieving success in physical education. A correlational design using a causal associative method was employed to gather data from a sample of 63 public high school students. Data collection was conducted through questionnaires and focused group discussions. Furthermore, IBM SPSS software was utilized to examine the effects of this study. The results indicate a significant correlation difference in physical education learning outcomes based on the predictors of students' perceptions and learning motivation. The strength of the direct influence confirms that students' perceptions and learning motivation significantly and positively impact physical education learning outcomes. Therefore, students' perceptions and learning motivation are the primary factors in determining physical education learning outcomes.

Keywords: Psychological, learning outcomes, influencing

Introduction

Physical education serves as a medium for shaping human life, as it helps students develop their potential through school-based physical education programs. Student potential can be enhanced through various sports and games that incorporate cognitive, affective, and psychomotor elements. These activities are tailored to students' growth and development levels, ensuring that the physical activities they engage in are systematically planned and continuously implemented to enhance overall bodily functions. Consequently, students' learning outcomes in physical education can be improved (Bailey, R., *et al.*, 2009) ^[1].

Good learning outcomes in physical education are expected to contribute to the development of well-rounded students—individuals capable of critical thinking, creativity, logical reasoning, and initiative in responding to social and technological phenomena in today's globalized society. Physical education aims to develop students' knowledge, skills, confidence, and values related to physical activity, including aesthetic and social development (Casey, A., & Goodyear, V. A., 2015) ^[4].

An initial observation conducted in March 2021 on the mid-term learning outcomes of physical education students at SMA Negeri 1 Sutera, Kecamatan Sutera, Kabupaten Pesisir Selatan, revealed that student achievement had not met expectations. Specifically, the mid-term exam results for physical education showed that many students had not achieved the Minimum Competency Criteria (KKM). In the 2021 academic year, the KKM for physical education remained at 75, based on the 2004 Education Unit Level Curriculum (KTSP). Out of 23 students (17 males and 6 females), the average score was 56 (below the passing standard), while only six students exceeded the KKM with an average score of 83. This indicates that the overall physical education learning outcomes for grade IX students remained low, with average scores falling below the KKM. Based on these findings, it is evident that the physical education learning outcomes of students at SMA Negeri 1 Sutera have not met expectations, as many students continue to score below the passing criteria. Several factors influence

students' learning outcomes in physical education, including the learning environment. A conducive learning environment provides more than just access to school facilities—it fosters close relationships that help students learn and solve problems collaboratively. A supportive learning environment enhances students' problem-solving abilities and their capacity to engage in academic negotiations (Lage, M. J., Platt, G. J., & Treglia, M., 2000 ^[10]; Marwan, D., 2013) ^[11].

Another external factor influencing students' learning outcomes is learning facilities, which include both infrastructure and educational resources. Learning facilities play a crucial role in supporting the teaching and learning process. When students have access to well-equipped and optimally utilized learning facilities, they tend to achieve higher learning outcomes (Sum, K. W. R., *et al.*, 2018) ^[22]. Parental support also significantly impacts students' learning achievements. Nopiyanto, Y. E., & Raibowo, S. (2020) ^[13] suggest that parental involvement plays an effective role in children's education. Overindulgence may result in dependency, while discipline and clear expectations foster independence. A supportive home environment should provide motivation, useful information, academic guidance, and positive reinforcement for students (Shukla, S. Y., *et al.*, 2015) ^[21].

Student perceptions of learning also play a critical role in determining academic success. Perception influences how students approach learning. One key type of perception is learned perception, which develops from experiences and observations of the surrounding environment. This type of perception shapes thoughts, ideas, and beliefs formed through interaction with others. Consequently, individuals react based on their acquired perceptions—similar to how children adopt their parents' behaviors and personalities. Students' perceptions of physical education influence their engagement and, ultimately, their learning outcomes (Yazid, T. P., & Ridwan, R., 2018) ^[26].

Active learning has a positive impact on students, as learning activities driven by intrinsic motivation indicate that students are already aware of the importance of

studying diligently. A clear example is that students with high motivation and active participation in learning tend to achieve better academic results (Nurmala, D. A., Tripalupi, L. E., & Suharsono, N., 2014 ^[15]; Warti, E., 2016 ^[25]; Saputra, H. D., Ismet, F., & Andrizal, A., 2018) ^[20]. Considering these factors, this study aims to investigate the influence of students' self-perception and learning motivation on their physical education learning outcomes at SMA Negeri 1 Sutera, Kecamatan Sutera, Kabupaten Pesisir Selatan.

Method

Population and Sample

The population of this study consists of 285 students from SMA Negeri 1 Sutera, Kecamatan Sutera, Kabupaten Pesisir Selatan. To collect data, this study employs a probability sampling technique based on predetermined research objectives, resulting in a sample of 63 students

Research Instrument

To verify the proposed hypothesis, measurements related to self-perception, motivation, and learning outcomes were conducted (Bui *et al.*, 2019 ^[3]; Fiske, Cuddy, & Glick, 2007) ^[7]. The research instrument used in this study is a survey questionnaire consisting of both open-ended and closed-ended questions designed to capture students' perceptions, views, and experiences.

The are two instruments used in this study. First is the instrument used to measure self-perception, with the indicators: academic achievement, varied learning experiences, verbal persuasion (feedback), and emotional stimulation (Sağrılı, M., & Okur, B., 2017) ^[19]. Second, the instrument is used to measure learning motivation, with the indicators: desire and ambition to succeed, emotional stimulation, drive and need for learning, aspirations and future goals, and recognition and rewards in learning (Hamzah, 2016:31) ^[8]

Data Analysis

First, descriptive statistics were examined to illustrate the general capabilities of self-perception, learning motivation, and physical education learning outcomes. To assess the conceptual relationship between the proposed variables, IBM SPSS software was utilized. The significance level was set at $p < 0.05$.

Result

To test the hypothesis stating that self-perception and learning motivation contribute to physical education learning outcomes, a simple linear regression analysis was conducted using SPSS 25 for Windows, as presented in the following table:

Table 1: Result Analysis of Varian (ANOVA)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	86,917	7,884		11,024	,000
	X1	-,089	,094	-,120	-,941	,350

a. Dependent Variable: Y

Table 2: R Square

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,320 ^a	,120	,002	3,604

a. Predictors: (Constant), X1

The table above illustrates the percentage of influence that the independent variable has on the dependent variable, known as the coefficient of determination, which is derived from the squared value of R. Based on the output, the R Square value is 0.120, meaning that the influence of the independent variable (self-perception) on the dependent variable (learning outcomes) is 12%.

Table 3: Result Analysis of Varian (ANOVA)

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	137,329	19,699		6,971	,000
	Y	-,774	,248	-,372	-3,129	,003

a. Dependent Variable: X2

Table 4: R Square

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,372 ^a	,138	,124	7,017

a. Predictors: (Constant), Y

The table above illustrates the percentage of influence that the independent variable has on the dependent variable, known as the coefficient of determination, which is derived from the squared value of R. Based on the output, the R Square value is 0.138, meaning that the influence of the independent variable (self-perception) on the dependent variable (learning outcomes) is 13.8%.

Discussion

Based on the research findings, it was discovered that self-perception and learning motivation significantly influence physical education learning outcomes. The relationship between movement skills (such as locomotor skills and object control) and physical activity, in terms of self-perception regarding physical aspects in physical education (such as health, coordination, sports abilities, strength, fitness, and self-esteem), was observed without developmental coordination issues in children aged 7-10 years. The study found that coordination is the only significant predictor of self-perception concerning physicality for object control skills. No variable from self-perception regarding physicality was found to be a significant predictor for locomotor skills. This means that children's coordination development is crucial in improving self-perception related to physical activities. Therefore, when self-perception is positive in physical activities within physical education lessons, it directly impacts the students' learning outcomes (Yu J, Sit CHP, Capio CM, *et al.*, 2016). Self-perception regarding learning outcomes in physical education is a crucial factor in their participation in physical activity-based learning (Crocker, Eklund, & Kowalski, 2000) ^[5]. The results of this study also report that children with more positive self-perception in physical aspects are

more likely to be motivated to engage in an active lifestyle, which leads them to achieve better learning outcomes in physical education (Raudsepp, Liblik, & Hannus, 2002) ^[16]. Additionally, self-perception in the physical domain is a key component of intrinsic motivation (Duda, Chi, Newton, Walling, & Catley, 1995) ^[16].

Furthermore, another factor influencing learning outcomes is learning motivation. Learning motivation is an internal factor that drives students to engage in an activity and achieve predetermined goals. High learning motivation will enhance students' enthusiasm for learning and, in turn, improve their learning outcomes. Various parties need to play a role in fostering students' motivation (Jamil, H., & Azra, F. I. 2014) ^[9].

Learning motivation plays a vital role in achieving learning outcomes. Motivation is a stimulus that triggers behavior, provides direction for behavior, and sustains strong behavior. In terms of learning, students will succeed if they have the desire, willingness, and drive to learn. Motivated students are more likely to take action, adjust their attitude, and engage in behavior that supports their learning. In line with Mulyasa (2010:174) ^[12], motivation is one of the factors that can improve the quality of learning because students will learn sincerely when they are highly motivated. Motivation encourages individuals to take actions related to achieving learning goals. Similarly, Ting, L., & Min, J. (2013, p.157) ^[23] state that enhancing students' learning motivation is crucial for the process of teaching and learning new knowledge or skills because motivation influences how teachers and students interact with learning material to achieve good learning outcomes.

According to this theory, competence motivation increases when an individual fully masters a task. Individuals who perceive themselves as physically competent tend to put more effort into motor skills and mastery efforts than those with poor physical self-perception, which indirectly influences students' learning outcomes (Yu J, Sit CHP, Capio CM, *et al.*, 2016).

Based on the research findings, learning motivation indeed influences learning outcomes. Learning motivation is closely linked to how students can stay focused and motivated to learn physical education in order to achieve good results. Low learning motivation will negatively affect students' learning outcomes. Therefore, physical education teachers need to create a conducive and engaging learning environment to help boost students' motivation.

This study supports the model process by Ryan, R. M., & Deci, E. L. (2000) ^[18], which suggests that participation and performance in physical education are influenced by autonomy support leading to the satisfaction of needs. This, in turn, affects learning motivation and perceived competence. The influence of learning motivation and perceived competence with learning strategies, as well as from learning strategies to performance and participation in physical education, was found to be significant. All indirect links in the structural model are also significant. Motivation support is defined as behavior that maintains and develops students' desire to learn (Reeve, J., 2009) ^[17]. Satisfaction of the three needs is central, and as hypothesized, motivation support impacts students' learning outcomes.

The findings suggest that fulfilling students' needs is important for understanding learning motivation and achieving learning outcomes. In line with previous research (Ntoumanis, N. 2005) ^[14], learning motivation is one of the

variables in the analysis to simplify these findings. Motivation is closely related to learning outcomes, meaning that an increase in students' learning motivation will have a positive impact on their learning outcomes (Bagøien, Halvari, & Nesheim, 2010).

Therefore, it can be concluded that learning motivation is a predictor for achieving good learning outcomes. Students' willingness to engage in learning actions drives them to enhance their understanding of the material. In this way, increasing students' learning motivation directly positively affects the improvement of their physical education learning outcomes at SD Negeri 10 Kunangan Parit Rantang, Kamang Baru District, Sijunjung Regency.

Conclusion

The findings of this study highlight the significant impact of self-perception and learning motivation on physical education learning outcomes. A positive self-perception, particularly in physical activities, enhances students' engagement and performance in physical education, while motivation drives their persistence and effort in learning. Therefore, fostering a positive self-image and maintaining high levels of motivation are crucial for improving students' overall learning results. Teachers should create supportive learning environments that promote these factors to ensure better outcomes in physical education.

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