



**Analysis of Physical Education Learning Motivation Based on Gender
Perspective at State Senior High School 2 Majalaya**

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Article History

Received October 2025

Accepted October 2025

Published Vol.14 No.(3) 2025

Keywords:

Learning Motivation; Physical Education; Gender

Abstract

This study aims to investigate the motivations for learning Physical Education, Sports, and Health (PE) among high school students from a gender perspective. The basis of this study is the importance of motivation as a key factor in student engagement, persistence, and academic achievement. This study is distinct from prior research, predominantly conducted at the elementary and junior high school levels, as it concentrates on high school and employs the Indonesian version of the Academic Motivation Scale (AMS) instrument, validated for its reliability and validity. This research adopts a descriptive quantitative methodology, with a sample selected through stratified random sampling, including both male and female students from State Senior High School 2 Majalaya. Data analysis was carried out through descriptive tests, normality tests, non-parametric Mann-Whitney tests, and effect size tests. The results showed no significant differences in PE learning motivation between male and female students. This finding is reinforced by the very Senior High School effect size, so the role of gender on learning motivation can be said to be limited. Thus, student learning motivation is more influenced by external factors such as learning methods, teacher support, and the learning environment. This research is expected to contribute to the literature on PE learning motivation as well as practical recommendations for teachers in designing more inclusive learning.

How to Cite

Afiah, M. B., Nugraha, R., & Riansyah, R. (2025). Analysis of Physical Education Learning Motivation Based on Gender Perspective at State Senior High School 2 Majalaya. *Journal of Physical Education, Sport, Health and Recreation*, 14 (3), 965-969.

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INTRODUCTION

Learning motivation is a fundamental factor that determines the quality of the learning process and outcomes. Students with high motivation tend to demonstrate more active engagement, persistence, and better academic achievement than students with low motivation (Abdurahman et al., 2024; Rahmi & others, 2023). In the context of physical education, sports, and health (PE), learning motivation is very important because movement-based learning requires active student participation. (Harris et al., 2024; Irawan et al., 2024). Motivation can be grouped into two dimensions, inside and outside. Intrinsic motivation comes from a person's desire to learn or be happy, while extrinsic motivation comes from outside factors like rewards or punishments (Ryan & Deci, 2000). Intrinsic motivation is linked to persistence and curiosity, while extrinsic motivation is linked to consistency and social support (Hardiningrum, 2018; Yeni & others, 2022).

Physical Education (PE) is not just about being physically fit; it also teaches values like discipline and sportsmanship. High school is a time to learn how to work with others and believe in yourself. These values aid in the moral and social development of students (Lestari & others, 2024; Nuraini & others, 2024). However, students' degree of learning motivation continues to have a significant impact on how well these values are internalized. Students lack the motivation to actively participate in physical education (PE) classes, making it challenging to meet learning objectives.

One factor that is frequently studied in relation to (Puspitawati, 2013) learning motivation is gender. gender is not merely a biological difference but also a social and cultural construct that shapes men's and women's roles, behaviors, and expectations. Research indicates that differences in brain structure, social perception, and cultural norms can affect students' motivational orientation in learning (Munawarah, 2021; Utami & Yonanda, 2020).

Research on how gender affects students' motivation to learn physical education (PE), however, continues to yield conflicting results. Male students are more motivated than female students, according to a number of studies conducted in Indonesia and other nations (Major Díez et al., 2024; Pramukti et al., 2024). Gender is not regarded as a dominant factor, though, as other studies reveal no discernible differences. (Fanani & Zuhroh, 2023; Mahyuni & Makorohim, 2023).

The variations in these results demonstrate that learning motivation is impacted by a variety of external factors, including social environment, learning methods, school facilities, and teacher support, in addition to gender (Saputra, 2024). This begs the question of whether other factors predominate or if gender actually has a significant impact on motivation to learn physical education.

There are currently few studies on gender-based physical education (PE) learning motivation in Indonesia, especially at the high school level. Prior studies have generally taken a qualitative approach and were mostly carried out in elementary and middle schools. Consequently, a high school-level descriptive quantitative study might offer a more thorough understanding of this phenomenon.

This study is novel because it uses a descriptive quantitative methodology and an Indonesian version of the Academic Motivation Scale (AMS), whose validity and reliability have been examined. (Marvianto & Widhiarso, 2019). In addition, this study also applies the non-parametric Mann-Whitney test to ensure the accuracy of the analysis results, considering that the student motivation data is not completely normally distributed.

METHODS

This study combined a descriptive method with a quantitative approach. Descriptive research is appropriate for analyzing students' motivation to learn physical education based on gender because it seeks to describe phenomena in a realistic, methodical, and factual manner (Rukajat, 2018; Sugiyono, 2019). Gender (male and female) was the study's independent variable, and motivation to learn physical education was its dependent variable (Sugiyono, 2013).

All of the students in grades X and XI at State Senior High School 2 Majalaya made up the study population. To guarantee equal representation of males and females, the sample was selected using a stratified random sampling technique; as a result, there were 130 students, 65 of whom were male and 65 of whom were female (Subhaktiyasa, 2024; Sulistiyowati, 2023).

The Academic Motivation Scale (AMS), created by Vallerand et al. (1992) and founded on the Self-Determination theory (Deci & Ryan, 1985). was the tool utilized. Students' intrinsic, extrinsic, and amotivation motivation can be measured with this scale, which has been translated into Indonesian and shown to be valid and reliable.

le (Marvianto & Widhiarso, 2019). A Likert scale with five points, from strongly disagree (1) to strongly agree (5), was used for the measurements (Sugiyono, 2014).

SPSS was used to analyze the gathered data in multiple steps (Fadluloh et al., 2024). First, using the average, standard deviation, minimum, and maximum values, a descriptive analysis was carried out to characterize the gender-based distribution of students' learning motivation scores (Rukajat, 2018; Sugiyono, 2020). Second, to ascertain whether or not the data was normally distributed, a normality test was performed using the Kolmogorov-Smirnov method (Sugiyono, 2017). Third, the non-parametric Mann-Whitney test was used to examine the differences in learning motivation between male and female students because the data did not fully satisfy the assumption of normalcy (Sugiyono, 2016). Fourth, to determine the level of practical significance of these differences, the effect size was calculated using Cohen's d, so that it can provide a clearer picture of the extent of the influence of gender on students' learning motivation (Becker, 2000; Santoso, 2010).

RESULTS AND DISCUSSION

Table 1. Descriptive Statistics

	N	Min	Max	Mean	Standard Deviation
Man	65	55	122	101.23	10,444
Woman	65	40	120	100.83	11,429

Based on the results **Table 1** of the descriptive analysis, it is known that male students have an average score of 101.23 with a standard deviation of 10.444, while female students have an average of 100.83 with a standard deviation of 11.429. This shows that the average of both groups is relatively similar, although male students tend to be more stable (Senior High Schooler variance), while female students are more varied in their value distribution. The range of values for female students is also wider (40–120) than male students (55–122), which indicates a difference in data distribution between groups. After conducting the descriptive test, the next stage is the normality test.

Based on the results of the Kolmogorov-Smirnov test, a significance value of 0.000 was obtained, which is less than 0.05. Therefore, the null hypothesis stating that the residual data is normally distributed is rejected. This indicates that the residuals from the regression model are

not normally distributed. Therefore, in the next stage of analysis, a non-parametric test, namely the Mann-Whitney test, was used because the data did not meet the normality assumption required in the parametric test.

Based on the Mann-Whitney test results, a significance value of 0.872 was obtained. This value was compared with a significance level of 0.05. Because the results obtained were >0.05, it can be concluded that there is no significant difference between the motivation of male and female students in learning Physical Education at State Senior High School 2 Majalaya.

Effect size is a measurement of the level of practical significance of research results, which can be in the form of the level of correlation, difference, or impact of one variable on another variable (Santoso, 2010). Effect size (d), according to Cohen (in Becker, 2000) is the difference between two means, and Description, divided by the standard deviation.

d = ((M_1- M_2))/S= 0,0365

Where:

M1 is the average of the first group.

M2 is the average of the second group.

S is the combined standard deviation of both groups

Table 2. Interpretation according to Cohen(in Becker, 2000)

Effect Size	Criteria
0.8 d 2.0	Small
0.5 d 0.8	Medium
0.2 d 0.5	Large

The results **Table 2** of the size effect test in this study, the value obtained was 0.03 which means the criteria are very Small, indicating that the influence of gender on motivation to learn PE at State Senior High School 2 Majalaya is very Small.

The results of this study indicate that gender does not significantly influence students' motivation to learn Physical Education (PE). This finding confirms that learning motivation is more influenced by external factors such as learning strategies, teacher support, and available facilities than by biological factors alone. This condition aligns with learning motivation theory, which emphasizes that student engagement in learning activities is determined more by meaningful learning experiences than by gender differences (Ryan & Deci, 2000; Saputra, 2024).

This finding aligns with earlier research indicating that gender does not play a significant role in influencing learning motivation (Fanani & Zuhroh, 2023; Mahyuni & Makorohim, 2023). However, other studies have found that male students tend to be more motivated in physical education (Major Díez et al., 2024; Pramukti et al., 2024). The research findings must be interpreted in a wider context because these discrepancies in outcomes could be explained by differences in the cultural context, instructional strategies, and tools employed.

Theoretically, this study adds to the body of knowledge on high school students' motivation to learn physical education, especially when it comes to gender perspectives. It makes use of the Academic Motivation Scale (AMS) in Indonesia, which has undergone validity and reliability testing (Marvianto & Widhiarso, 2019). This study presents a fresh, descriptive quantitative method that isn't often applied in Indonesia. This is significant because prior research has mostly used qualitative methods and was carried out at the elementary and junior high school levels.

Practically speaking, physical education teachers can use the study's findings as a guide to concentrate more on teaching methods that can boost male and female students' motivation. It has been demonstrated that teachers can boost learning motivation by maximizing participatory methods, offering a range of activities, and instilling character values like discipline, cooperation, and sport (Lestari & others, 2024; Nuraini & others, 2024). Therefore, using a suitable pedagogical approach rather than treating people differently based on their gender can increase learning motivation.

However, it is important to take into account the limitations of this study. The results may not be representative of all Indonesian school contexts because the study was limited to State Senior High School 2 Majalaya. Additionally, the study variables only took gender into account, ignoring other elements that might also have an impact on learning motivation, such as socioeconomic status, family support, or personal interests. For more thorough results, it is advised that future studies include a larger sample size, more schools, and additional pertinent variables.

CONCLUSION

Male and female students at State Senior High School 2 Majalaya did not effectively differ in their motivation to learn physical education (PE), according to this study. This demonstra-

tes that external factors like teacher support, learning strategies, and the school environment have a greater influence on learning motivation than gender. Therefore, inclusive and supportive learning strategies for all students, regardless of gender, must be the main focus of initiatives to increase learning motivation.

It is anticipated that the findings of this study will contribute to the body of knowledge on gender-based motivation for learning physical education while also offering useful suggestions for educators creating more inclusive teaching methods. As a result, this study advances both the theoretical and practical aspects of physical education in secondary schools.

The overall goal of this study is to determine whether male and female students are more or less motivated to learn physical education, as well as how much gender affects learning motivation. These findings can provide an important foundation for formulating more effective strategies for strengthening learning motivation in the future.

REFERENCES

- Abdurahman, K., Rakhman, P. A., & Rokmanah, S. (2024). Pengaruh Motivasi Belajar Terhadap Hasil Belajar Peserta Didik. *IJEDR: Indonesian Journal of Education and Development Research*, 2(1), 46–55. <https://doi.org/10.57235/ijedr.v2i1.1497>
- Becker. (2000). Effect Size (ES). *Dictionary of Statistics & Methodology*, 1993. <https://doi.org/10.4135/9781412983907.n624>
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. Springer Science & Business Media.
- Fadluloh, F. M., Sartono, H., Kusumah, W., & Mulyana, M. (2024). Athletes' Perception of Parental Support and Achievement Motivation: A Correlational Study with Early Age Individual Sport Athletes in Swimming. 412–421. <https://doi.org/https://doi.org/10.31949/ijsm.v4i4.11454>
- Fanani, A., & Zuhroh, S. (2023). Analisis perbedaan motivasi belajar PJOK berdasarkan gender. *Jurnal Penelitian Olahraga*, xx(x), xx--xx.
- Hardiningrum, S. (2018). Faktor intrinsik dan ekstrinsik dalam meningkatkan motivasi belajar. *Jurnal Psikologi Pendidikan*, xx(x), xx--xx.
- Haris, I. N., Yulianto, A. G., Rosti, R., & Puniasari, N. L. (2024). Hasil Belajar Penjas Peserta Didik Ditinjau dari Segi Motivasi. *Biomatika: Jurnal Ilmiah Fakultas Keguruan Dan Ilmu Pendidikan*, 10(1), 1–9. <https://doi.org/10.35569/biormatika.v10i1.1909>
- Irawan, D. C., Aziz, M. Z., & Wibisono, I. G. A. B. (2024). Hubungan antara motivasi siswa dengan efektivitas pembelajaran pada mata

- pelajaran pendidikan jasmani olahraga dan kesehatan. *Jurnal Olahraga Pendidikan Indonesia (JOPI)*, 3(2), 105–115. <https://doi.org/10.54284/jopi.v3i2.303>
- Lestari, D., & others. (2024). Nilai karakter dalam pembelajaran PJOK. *Jurnal Pendidikan Karakter*, xx(x), xx–xx.
- Mahyuni, & Makorohim. (2023). Analisis motivasi belajar PJOK ditinjau dari gender. *Jurnal Pendidikan Olahraga*, xx(x), xx–xx.
- Marvianto, R. D., & Widhiarso, W. (2019). Adaptasi Academic Motivation Scale (AMS) versi Bahasa Indonesia. *Gadjah Mada Journal of Psychology (GamaJoP)*, 4(1), 87. <https://doi.org/10.22146/gamajop.45785>
- Mayor Díez, I., Sanchis Soler, G., & Avalos-Ramos, A. (2024). Gender and age differences in motivation towards Physical Education in Spanish students. *Echa Recepción*, xx(x), xx–xx.
- Munawarah. (2021). Meta Analysis: Pengaruh Gender Terhadap Faktor Psikologis Belajar Siswa. *Rumah Jurnal IAIN Bone*, 14(2), 58–66.
- Nuraini, S., & others. (2024). Penguatan aspek moral dan sosial siswa melalui PJOK. *Jurnal Ilmu Keolahragaan*, xx(x), xx–xx.
- Pramukti, A. N., Subroto, T., & Rahmat, A. (2024). Analisis Motivasi Belajar Pendidikan Jasmani Ditinjau dari Jenis Kelamin. *Jurnal Pedagogik Olahraga*, xx(x), xx–xx.
- Puspitawati, H. (2013). *Konsep, Teori dan Analisis Gender*. PT IPB Press.
- Rahmi, A., & others. (2023). Motivasi belajar dan pencapaian siswa. *Jurnal Pendidikan*, xx(x), xx–xx.
- xx.
- Rukajat, A. (2018). *Pendekatan Penelitian Kuantitatif: Quantitative Research Approach*. Deepublish.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. In *Contemporary Educational Psychology* (Vol. 25, Issue 1, pp. 54–67). <https://doi.org/10.1006/ceps.1999.1020>
- Santoso, A. (2010). Studi Deskriptif Effect Size Penelitian. *Jurnal Penelitian*, 14(1), 1–17.
- Saputra, D. (2024). Faktor lingkungan terhadap motivasi belajar siswa PJOK. *Jurnal Pendidikan Jasmani*, xx(x), xx–xx.
- Subhaktiyasa, P. (2024). Konsep Populasi dan Generalisasi dalam Riset Pendidikan. *Jurnal Ilmiah Pendidikan*, 8(1), 55–64.
- Sugiyono. (2016). *Metode penelitian kuantitatif, kualitatif, dan R&D*. ...
- Sugiyono. (2017). *Statistika untuk Penelitian*. Alfabeta.
- Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sulistiyowati, I. (2023). Definisi Populasi dan Sampel dalam Penelitian Pendidikan. *Jurnal Pendidikan Indonesia*, 12(3), 211–219.
- Utami, N. E. S., & Yonanda, D. A. (2020). Hubungan Gender Terhadap Prestasi Belajar Siswa. *Seminar Nasional Pendidikan, FKIP UNMA*, 144–149. <https://prosiding.unma.ac.id/index.php/semnasfkip/article/view/314>
- Yeni, F., & others. (2022). Motivasi intrinsik dan ekstrinsik dalam pembelajaran siswa. *Jurnal Psikologi Pendidikan*, xx(x), xx–xx.