



Analysis of The Leadership Level of Students Participating in Volleyball and Non-Volleyball Extracurricular Activities

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History Article

Received April 2026

Approved April 2026

Published vol 13 no 1 2026

Keywords

Leadership; Extracurricular Activities; Volleyball

Abstract

Leadership is an important aspect in shaping student character, and can be developed not only through classroom learning but also through extracurricular activities. Volleyball, as a team sport, is thought to foster leadership skills such as teamwork, communication, and decision-making. However, there is no clear evidence as to whether involvement in these activities significantly differentiates the leadership levels of students compared to those who do not participate. Therefore, this study was conducted to examine differences in student leadership levels based on participation in volleyball extracurricular activities at Nyalindung 1 Middle School. This research uses a quantitative approach with a comparative descriptive design. The research sample consisted of 30 students consisting of 15 students who participated in volleyball extracurricular activities and 15 students who did not participate in volleyball extracurricular activities, using a purposive sampling technique. The research instrument used a student leadership questionnaire consisting of 30 statements with a 4-point Likert scale. The results of the reliability test showed a Cronbach's Alpha value of 0.862, which indicates a reliable instrument. The results of the descriptive analysis show that the average leadership score of students who participated in volleyball extracurricular activities was 108.07, while that of students who did not participate in volleyball extracurricular activities was 104.80. The results of the normality test showed that one of the data groups was not normally distributed, so the hypothesis test was carried out using the Mann-Whitney test. Hasil uji Mann-Whitney menunjukkan nilai Asymp. Sig. (2-tailed) sebesar 0,603 > 0,05, yang berarti tidak terdapat perbedaan yang signifikan antara kedua kelompok. The effect size value of 0.09 indicates that the difference that occurred was in the small effect category. Based on the research results, it can be concluded that students who participate in volleyball extracurricular activities have a slightly higher level of leadership descriptively, but the difference is not statistically significant.

How to Cite

Nurahasana, A., Carsiwan., & Nuryadi. (2026). Analysis of The Leadership Level of Students Participating in Volleyball and Non-Volleyball Extracurricular Activities. Journal of Physical Education, Health and Sport, 13 (1), 410-413.

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INTRODUCTION

Leadership is a crucial skill that needs to be developed in students from an early age, as it plays a role in shaping character, responsibility, and the ability to work together. Leadership development is not only achieved through classroom learning but can also be fostered through extracurricular activities. One activity that has the potential to develop leadership is volleyball, as it requires students to work together, communicate, be disciplined, and be able to make decisions quickly (Syahril, 2019). In addition, leadership is also influenced by emotional intelligence, such as the ability to manage emotions and build social relationships (Goleman, 2017).

Based on observations at Nyalindung 1 Middle School, student leadership development still relies primarily on formal classroom learning. Meanwhile, student involvement in extracurricular activities, particularly volleyball, has not been optimally utilized as a means of leadership development (Cerlin, 2024). Furthermore, it is unclear whether there is a difference in leadership levels between students who participate in volleyball extracurricular activities and those who do not. Furthermore, research by (Basir & Ramadan, 2017), confirms that student leadership is not formed instantly, but rather through experience and habituation. Therefore, empirical research is needed to determine whether participation in volleyball extracurricular activities truly makes a difference in students' leadership levels.

Volleyball extracurricular activities are one of the sports activities that many students are interested in. As a team sport, volleyball requires coordination, communication, cooperation, discipline, and quick decision-making in the game. Extracurricular activities such as team sports like volleyball make a significant contribution to shaping students' character and leadership skills (Haprabu et al., 2025).

Previous research has shown that extracurricular activities play a significant role in developing student leadership. According to (Fredricks & Eccles, 2006), students who are active in extracurricular activities tend to have better social and leadership skills. Furthermore, research by (Haprabu et al., 2025). Suggests that volleyball activities can improve students' communication, teamwork, and leadership skills. Similarly (Karina et al., 2024). Revealed that team sports can improve decision-making and emotional control, which are essential elements of leadership. However, research specifically

comparing leadership levels between students who participate in volleyball and those who do not is limited.

Therefore, this study was conducted to analyze the differences in leadership levels between students who participate in volleyball extracurricular activities and students who do not participate in volleyball extracurricular activities at Nyalindung 1 Middle School.

METHOD

This research uses a quantitative approach with a comparative descriptive design, namely a method that aims to compare two groups based on certain variables (Sugiyono, 2018). The research was conducted at Nyalindung 1 Middle School with the aim of comparing the leadership levels between two groups of students, namely students who participated in volleyball extracurricular activities and students who did not participate in volleyball extracurricular activities.

The research sample consisted of 30 students, 15 of whom participated in extracurricular volleyball activities and 15 of whom did not. The sample consisted of male and female students aged 13–15 years. The sampling technique used was purposive sampling, which is the selection of samples based on certain criteria relevant to the research objectives (Gifari, 2012). The research instrument used a student leadership questionnaire consisting of 30 statements with a 4-point Likert scale (Tangkudung, 2018). This instrument was structured based on leadership aspects relevant to the characteristics of junior high school students. The reliability test results showed a Cronbach's Alpha value of 0.862 (Ghazali, 2018). Indicating that the instrument has a high level of reliability and is suitable for use in research.

Data analysis techniques were carried out using descriptive analysis, normality testing, and hypothesis testing. Descriptive analysis was used to obtain a general overview of students' leadership scores.

A normality test was conducted to determine the distribution of data in each group. Because one of the data groups was not normally distributed, the hypothesis test was conducted using the non-parametric Mann-Whitney U Test.

RESULTS AND DISCUSSION

The results of the descriptive analysis show that students who participated in volleyball extracurricular activities had an average leadership score of 108.07, while students who did not par-

ticipate in volleyball extracurricular activities had an average score of 104.80. Descriptively, these results indicate that the group of students who participated in volleyball extracurricular activities had a slightly higher level of leadership than the non-volleyball group.

The results of the normality test indicated that one of the data groups was not normally distributed. Therefore, the hypothesis testing was not conducted using parametric tests, but rather using the Mann-Whitney U test.

Table 1. Test result Mann-Whitney

Group	N	Mean Rank	Sum of Rank
Volleyball	15	16,33	245,00
Non-Volleyball	15	14,67	220,00

Based on the results of the Mann-Whitney test, the Asymp. Sig. (2-tailed) value was 0.603. Since the significance value is greater than 0.05, it can be concluded that there is no significant difference between the leadership levels of students who participate in volleyball extracurricular activities and students who do not participate in volleyball extracurricular activities. In addition, the mean rank value for the volleyball group was 16.33, while the non-volleyball group was 14.67, which indicates a tendency for slightly higher scores in the volleyball group, although not statistically significant.

An effect size of 0.09 indicates that the difference in leadership levels between students who participate in and those who do not participate in volleyball extracurricular activities is small, so practically the difference can be ignored. However, descriptively, students who participate in volleyball extracurricular activities will have higher leadership scores. Involvement in extracurricular activities can provide social experiences that support students' leadership development, such as cooperation and social interaction (Shilviana & Hamami, 2020).

Involvement in team sports such as volleyball theoretically has the potential to develop leadership skills, such as communication, discipline, responsibility, and decision-making. Volleyball activities can improve social and leadership skills through hands-on team experience. However, statistical tests in this study showed that these differences were not significant, so participation in volleyball extracurricular activities cannot be considered a primary factor in differentiating students' leadership levels (Fredricks & Eccles, 2006).

However, statistical test results indicate that this difference is not significant. This means that participation in volleyball extracurricular activities cannot be considered a significant factor in differentiating the level of student leadership in this study. In other words, although volleyball has educational value in character development, its influence on student leadership in the context of this study is not yet strong enough to be proven statistically (Rachmat Subarkah et al., 2023).

These findings indicate that student leadership is likely influenced by various other factors, such as family environment, organizational experience, teacher involvement, social interactions, school culture, and student involvement in activities outside of volleyball. Therefore, student leadership development cannot rely solely on a single extracurricular activity but needs to be supported by a variety of ongoing educational experiences (Albert Bandura, 1977).

The results of this study also indicate that student leadership is likely influenced by various other factors, such as family environment, organizational experience, school culture, and social interactions (Rodiyana & Puspitasari, 2019). Therefore, leadership development cannot rely solely on a single extracurricular activity but requires a more comprehensive approach.

Furthermore, there are several weaknesses in this study that need to be considered. The relatively small sample size and the use of purposive sampling technique may limit the generalizability of the results. Furthermore, this study focused only on one type of extracurricular activity, thus not being able to describe the influence of other activities on student leadership. These findings indicate that although volleyball extracurricular activities theoretically have the potential to develop leadership, in the context of this study, their influence was not yet significantly evident.

Based on these results, the researchers suggest that student leadership development should not be focused solely on a single extracurricular activity but should be supported by a variety of integrated school programs, such as student organizations, social activities, and character development. Furthermore, further research is recommended to use a larger sample size, involve various types of extracurricular activities, and consider other factors influencing student leadership to obtain more comprehensive results.

CONCLUSION

Based on the research results, it can be concluded that there is no statistically significant dif-

ference in leadership levels between students who participate in volleyball extracurricular activities and students who do not participate in them at Nyalindung 1 Middle School. Although descriptively, students who participate in volleyball extracurricular activities show a slightly higher average leadership level, the difference is not strong enough to be declared significant. This indicates that participation in volleyball extracurricular activities is not yet a major determining factor in differentiating student leadership levels. Thus, student leadership development is likely also influenced by other factors beyond participation in extracurricular activities, such as the environment, experience, and individual character.

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