

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

Novita Resti Anggraeni¹, Adi Sucipto², Rochsun³

^{1,2,3}Pendidikan Olahraga, Universitas Insan Budi Utomo Malang

ABSTRACT: This study aims to determine the differences in resilience, prosocial behavior, and sportsmanship between Vocational High School (SMK) students who participate and do not participate in extracurricular basketball. The background of this research is based on the importance of character education in vocational schools and the role of extracurricular sports, especially basketball, in shaping students' mental toughness, social attitudes, and sportsmanship values. The study used a comparative method with a quantitative design. The sample consisted of 120 students of SMK Yos Sudarso, Rembang Regency, Central Java, which was divided into two groups, namely 60 students who participated and 60 students who did not participate in extracurricular basketball. The data collection instrument was a Likert scale questionnaire, and data analysis was conducted using normality, homogeneity, and Welch's t-test to test for differences between groups. The results showed a significant difference between the two groups in all three aspects studied. Students who take part in extracurricular basketball have higher levels of resilience, prosocial behavior, and sportsmanship compared to students who do not. This finding indicates that involvement in extracurricular basketball makes a positive contribution to students' character development.

KEYWORDS: resilience, prosocial behavior, sportsmanship, extracurricular, basketball, vocational students.

I. INTRODUCTION

Education aims to shape students to have knowledge, skills, and positive attitudes in living life. At the Vocational High School (SMK) level, character education is very important to prepare students for the world of work¹. Vocational school is a crucial phase of development, characterized by physical, cognitive, and social-emotional changes. The amount of PJO material and the need for students to develop talents and achievements encourage schools to consider increasing learning time. One solution is through extracurricular activities as enrichment outside of class hours².

Extracurricular activities are activities that are carried out outside of lesson hours (face-to-face) both at school and outside of school hours with the intention of broadening the horizons of knowledge and abilities that they already have from various fields of study³. One of the extracurricular activities that students are very interested in is extracurricular sports activities, through extracurricular sports activities, in addition to students deepening and expanding knowledge, it can also be utilized as an effort to foster, strengthen, and form students' personality values, such as cooperation, mutual respect, sportsmanship, enthusiasm and self-confidence⁴. For extracurricular sports activities, one of them is basketball⁵.

The existence of extracurricular activities is very good if it is placed in its role with a clear purpose. Extracurricular activities are not only a complement to school learning but instead become a place to develop the talents embedded in students. The basketball game itself can also be used as a means to develop skills, knowledge and cooperation, responsibility, honesty, resilience, prosocial behavior, and sportsmanship. One method used in instilling these values is through extracurricular activities, such as basketball, which not only improves physical skills but also shapes student character.

Resilience is an individual's ability to face and recover from adversity⁶. Resilient students tend to be better able to manage stress and failure. Prosocial behavior, the act of helping without expectation of reward, is important in students' social interactions. Team sports activities like basketball can foster cooperation, empathy and caring. Sportsmanship is also developed through sport, which includes respecting your opponent, following the rules, and accepting defeat⁷.

Extracurricular sports, especially basketball, play a role in shaping student character. Students who are active in sports activities tend to experience better psychological and social development compared to students who do not participate in similar activities. Participation in sports can promote resilience, prosocial behavior and sportsmanship. Resilience is an individual's ability to face and overcome difficulties or challenges in life. In the context of sport, mental toughness is instrumental in improving an athlete's

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

performance and fighting power. Prosocial behavior refers to actions that aim to help or benefit others without expecting anything in return. Sports activities can encourage better social interaction, increase empathy, and form a caring attitude towards others. Sportsmanship in sports reflects an attitude of fairness, respect for the rules, opponents, and referee decisions. Experience in sports can shape one's character in appreciating competition and upholding the values of honesty. Students who do not participate in extracurricular activities have differences in these aspects compared to students who do.

On the other hand, vocational students who do not participate in extracurricular basketball are less likely to experience team challenges and develop social skills. Non-engagement in sports reduces opportunities to learn cooperation, resolve conflicts and build healthy relationships, which can lead to lower resilience, prosocial behavior and sportsmanship. Although the benefits of sports on character building have been widely researched, there are still few that discuss the specific differences between students who participate and do not participate in extracurricular basketball. Therefore, this study aims to compare resilience, prosocial behavior, and sportsmanship between the two groups of vocational students.

II. METHODES

This study used a comparative research design. Comparative analysis, often known as comparison, is a statistical process that tests for differences between two or more sets of data (variables) ⁸. This study aims to measure the comparison of toughness, proroal behavior, and sportsmanship in vocational students who participate and do not participate in extracurricular basketball.

A. Participants

Students of SMK Yos Sudarso, Rembang Regency, Central Java are the population in this study, the sample amounted to 120 students, where the research subjects were divided into two groups. The first group had 60 students who participated in extracurricular basketball and the second group had 60 students who did not participate in extracurricular basketball.

Sampling techniques fall into two categories: probability and non-probability sampling ⁹. The technique used in this research is non-probability, where elements of the population are not randomly selected. Samples are selected based on certain criteria or ease of access, rather than randomly^{10,11}.

B. Instrument and Procedures

The instrument used in this research is a questionnaire, which is to collect data by giving or distributing a series of questions to respondents using a Likert scale and designed in the form of a checklist. The Likert scale will respond to a given stimulus in the form of semantic categories, indicating a certain level of character or description.

C. Data Analysis

The normality test is a way to test the statistics used in checking whether the data is normally distributed or not ¹². The Kolmogorov-Smirnov method was used to test the normality of the data in this study, because the subjects used were more than 50 samples ($n > 50$ Based on the amount of probability asymp.sig (2-tailed), the author chooses the class level or significance level of 5% ($p > 0.05$).

The homogeneity test is a statistical method that aims to check whether the samples come from the same population or not. The homogeneity test serves to compare two or more groups ¹³. In this study, the authors used Levene's test. Data will be declared homogeneous if the significance level ($p\text{-value} > 0.05$).

If the prerequisite tests were met, hypothesis testing followed. SPSS version 26 was used in handling data to assess the research hypothesis using the independent t-test. The independent t-test aims to compare the differences between students who participate and do not participate in extracurricular basketball. Hypothesis testing uses a significance level ($p\text{-value} < 0.05$).

III. RESULTS

a. Description of research data

This data description provides an initial description of the distribution and central tendency of the variables studied, namely resilience, prosocial behavior, and sportsmanship, both in groups of students who participate and those who do not participate in extracurricular basketball.

Table 1. Descriptive Statistics

Aspects	Group	Min	Max	Mean	Std. Deviation
Resilience	Participate In Extracurricular	75	90	83,70	3,828
	Not Participating in Extracurricular	55	78	65,70	5,381

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

Prosocial	Participate In Extracurricular	70	94	81,07	6,178
	Not Participating in Extracurricular	55	80	68,95	5,431
Sportsmanship	Participate In Extracurricular	62	74	68,45	2,561
	Not Participating in Extracurricular	51	69	60,82	4,849

In the aspect of resilience of students who take part in extracurricular basketball. The minimum score is 75, while the maximum score is 90. With an average value in the group that participated in extracurricular activities of 83.70 and a standard deviation of 3.828. On the other hand, in the group that did not participate in extracurricular basketball, there was a minimum value of 55 and a maximum value of 78, with an average of 65.70 and a standard deviation of 5.381.

On the prosocial aspects of students who take part in extracurricular basketball. The minimum score was 70, while the maximum score was 94. With an average value in the group that participated in extracurricular activities of 81.07 and a standard deviation of 6.178. On the other hand, in the group that did not participate in extracurricular basketball, there was a minimum value of 55 and a maximum value of 80, with an average of 68.95 and a standard deviation of 5.431.

On the sportsmanship aspect of students who take part in extracurricular basketball. The minimum score was 62, while the maximum score was 74. With a mean value in the extracurricular group of 68.45 and a standard deviation of 2.561. On the other hand, in the group that did not participate in extracurricular basketball, there was a minimum value of 51 and a maximum value of 69, with an average of 60.82 and a standard deviation of 4.849.

b. Normality Test

The normality test in this study used Kolmogorov-Smirnov, because the subjects used were more than 50 samples ($n > 50$). The results of the normality test were carried out on each analysis group using the SPSS 26 software program with a significance level of 0.05. A summary of the normality results can be seen in the following table.

Table 2. Normality Test Results

Groups		<i>p</i>	Sig.	Description
Resilience	Participate In Extracurricular	0.200	0,05	Normal
	Not Participating in Extracurricular	0.200		
Prosocial	Participate In Extracurricular	0.165		Normal
	Not Participating in Extracurricular	0.095		
Sportsmanship	Participate In Extracurricular	0.092		Normal
	Not Participating in Extracurricular	0.092		

Based on the statistical analysis of the normality test that has been carried out using the Kolmogorov-Smirnov test, all data on the aspects of resilience, prosocial, and sportsmanship are obtained from the results of the data normality test, the significance value is $p > 0.05$, which means that the data is normally distributed.

c. Homogeneity Test

The homogeneity test is intended to test the similarity of the sample, namely whether the sample variance is uniform from the population. The homogeneity test in this study used Levene's Test of Equality of Error Variances. Homogeneity criteria if the significance (sig) > 0.05 .

Table 3. Homogeneity Test Results

Aspects	<i>Levene Statistic</i>	df1	df2	sig	Description
Resilience	4,987	1	118	0,27	Tidak Homogen
Prosocial	4,806	1	118	0,30	Tidak Homogen
Sportsmanship	33,059	1	118	0,00	Tidak Homogen

Based on the output results obtained from data analysis using SPSS version 26. On the results of the analysis of the aspects of resilience, prosocial, and sportsmanship. So from the results of this data analysis, it can be concluded that the data groups used do not have equal variances or are not homogeneous.

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

d. Comparative Analysis Results

In the prerequisite test results that the data are normally distributed, and the data do not have equal variance or are not homogeneous, the Welch's t-test is chosen as an alternative t-test that is suitable for data with inhomogeneous variance.

1. Comparison of Resilience between Students Who Participate and Do Not Participate in Extracurricular Activities

The hypothesis test used in this study is welch's t-test. Welch's t-test results showed a significant comparison in the level of resilience between the two groups. Resilience showed a significant comparison between students who participated and did not participate in extracurricular basketball ($t(106.538) = 21.112$, $p < 0.001$). The average difference in toughness was 18.

Table 4. Results of Comparison of Aspects of Resilience

	Levene's Test Sig.	t	Sig. (2-tailed)	Mean Difference
Resilience	0,027	21,112	0,000	18.000

That there is a very significant difference between students who participate and do not participate in extracurricular basketball in terms of toughness, where students who participate in extracurricular activities have a higher average toughness.

2. Comparison of Prosocial Behavior between Students Who Participate and Do Not Participate in Extracurricular Activities

Welch's t-test results showed a significant comparison in the level of prosocial behavior between the two groups. Prosocial behavior showed a significant comparison between students who participated and did not participate in extracurricular basketball ($t(115.584) = 11.493$, $p < 0.001$), with an average difference of 12.117.

Table 5. Results of Comparison of Aspects of Prosocial Behavior

	Levene's Test Sig.	t	Sig. (2-tailed)	Mean Difference
Prosocial Behavior	0,030	11,493	0,000	12,117

Results showed a significant difference in prosocial behavior between the two groups of students, with the extracurricular group showing higher prosocial behavior.

3. Comparison of Sportsmanship between Students Who Participate and Do Not Participate in Extracurricular Activities

Welch's t-test results showed a significant comparison in the level of sportsmanship between the two groups. Sportsmanship showed a significant comparison between students who participated and did not participate in extracurricular basketball ($t(89.536) = 10.783$, $p < 0.001$). Students who take part in extracurricular basketball have higher sportsmanship by 7.633.

Table 6. Results of Comparison of Aspects Sportsmanship

	Levene's Test Sig.	t	Sig. (2-tailed)	Mean Difference
Sportsmanship	0,000	10,783	0,000	7,633

From the results of the analysis, the significance value of 0.000 and the t value of 10.783 indicate that there is a significant difference in the sportsmanship aspect between the two groups. The group that participated in extracurricular activities had higher average sportsmanship.

IV. DISCUSSION

This research reveals that students who take part in extracurricular basketball have a significantly higher level of resilience compared to students who do not take part in extracurricular basketball. This increase in resilience could be due to various factors associated with participation in team sports. Extracurricular basketball involves intense physical exercise, competition and teamwork, all of which can help develop resilience, optimism, self-confidence, a positive mindset and perseverance. Students who are active in extracurricular activities, especially basketball team sports, are accustomed to facing pressure, overcoming failure, and learning from experience, so they become more resilient in facing challenges outside the field.

Involvement in school sports activities, such as basketball, can improve students' mental resilience. Participation in regular exercise significantly improves resilience scores of primary to secondary school students¹⁴. Involvement in school sports competitions not only strengthens students' resilience, but also facilitates adjustment to the school environment¹⁵. There is a

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

significant effect of social support on the mental toughness of basketball student-athletes.¹⁶ The study emphasized the importance of the role of significant others in providing support that can help athletes cope with pressure and increase mental toughness.

The existence of additional time outside of special school hours also causes students to be able to further develop their social attitudes towards other friends including empathy^{17,18}. In extracurricular basketball activities, students are taught to work together, help each other, and respect each other.

When a teammate has difficulty or makes a mistake, students learn to understand and feel what their peer is feeling. This experience can help students develop concern for others and motivate them to provide support and assistance. Students who are active in extracurricular activities, including sports, tend to show higher levels of prosocial behavior¹⁹. These studies emphasize the importance of extracurricular activities as a forum for developing prosocial values in students.

Prosocial behavior refers to actions taken to help others without expecting anything in return²⁰.

In the context of team sports, students regularly engage in activities that demand cooperation, sharing and mutual assistance. In a basketball game, players must work together to achieve a common goal, such as scoring points or defending against an opponent's attack. Through these interactions, students learn to appreciate the importance of each individual's contribution to the team and develop a sense of responsibility for the well-being of the team as a whole. Team sports can also increase student empathy. When a teammate has difficulty or makes a mistake, students learn to understand and feel what their peer is feeling.

This experience can help students develop concern for others and motivate them to provide support and assistance. Students who are active in extracurricular activities, including sports, tend to show higher levels of prosocial behavior²¹. These studies emphasize the importance of extracurricular activities as a forum for developing prosocial values in students.

Sportsmanship not only includes adherence to the rules and ethics of the game, but also reflects an attitude of respect for opponents, accepting defeat gracefully, and avoiding cheating behavior. In extracurricular basketball, students are taught to play honestly, respect the referee's decision, and show a good attitude towards opponents, both in victory and defeat. These values are not only important in sports, but are also relevant in everyday life.

Sportsmanship is an important value in sports that emphasizes fair play and ethics. In extracurricular basketball, students are taught to respect referees, coaches, opponents, and teammates. Students learn to play honestly, follow the rules, and accept the results of the game gracefully. These values can be applied in everyday life, helping students become individuals of integrity and responsibility. In extracurricular basketball, students are taught to play honestly, fairly, and respect the rules of the game, opponents, and referees. Students learn to accept victory humbly and defeat gracefully. Students who take part in extracurricular sports have a higher level of sportsmanship than students who do not take part in extracurricular sports²².

V. CONCLUSION

Based on the results of data analysis, it can be concluded that there are significant differences in the level of resilience, prosocial behavior, and sportsmanship between the two groups of students. Students who participate in basketball extracurricular activities show higher levels of resilience, prosocial behavior, and sportsmanship compared to students who do not participate in extracurricular activities. This finding indicates that extracurricular basketball has a positive role in developing the character of vocational school students.

ACKNOWLEDGMENT

We would like to sincerely thank all of the participants and agencies that helped make this study a success.

REFERENCES

- 1) Zumi M', Sujannah N, Saleh S. Strategy Of Religious Character Formation Of Students At The Negerior High School 1 (Smk N 1) Puloampel Through Habituation Of Dhuha And Tadarrus Shalaths. 2024;10(1):1-14.
- 2) Hakim MRN, Ismaya B, Achmad IZ. Students' Interest Level in Participating in Futsal Extracurricular at SMAN 1 Pagaden Subang. *Judika (Jurnal Pendidik Unsika)*. 2022;10(1):57-65. doi:10.35706/judika.v10i1.6712
- 3) Umamah KN, Anggraini MP, Edyta N, Faradiba AT. Academic Achievement Viewed from Adolescent Involvement in Extracurricular Activities. *J Muara Ilmu Sos Humaniora, dan Seni*. 2018;2(1):108. doi:10.24912/jmishumsen.v2i1.1688
- 4) Afrizal A, Nababan MB, Hartono M, Nursafiah N, Suriani H, Khairuddin K. Socialization of Extracurricular Sports Development at SMAN 2 Lawe Sigala-Gala, Southeast Aceh Regency. *COVIT (Community Serv Tambusai)*. 2023;3(2):129-135.

Resilience, Prosocial Behavior, and Sportsmanship of Vocational School Students: Basketball Extracurricular Participants Vs. Non-Participants

- 5) Zulfiani LF. The Effect of Basketball Extracurricular on Sports Subject Learning Achievement. *J Pendidik (Teori dan Prakt.* 2021;5(2):36-39. doi:10.26740/jp.v5n2.p36-39
- 6) Mahendika D, Sijabat SG. The Influence of Social Support, Coping Strategies, Resilience, and Self Esteem on Psychological Well-Being of High School Students in Sukabumi City. *J Psikol dan Konseling West Sci.* 2023;1(02):76-89. doi:10.58812/jpkws.v1i02.261
- 7) Jamiat A, Kustati M, Amelia R, Islam U, Imam N, Padang B. Mentoring futsal activities in fostering the talents of junior high school students. 2024;2(November):56-65.
- 8) Hidayat T. Comparative Study of the Two Largest Fitness Centers in Bandung City in Terms of Service Quality and Facilities and Their Effect on Visitor Interest. *J Pendidik Jasm Dan Olahraga.* 2017;2(1):10. doi:10.17509/jppo.v2i1.6396
- 9) Subhaktiyasa PG. Determining Population and Sample: Quantitative and Qualitative Research Methodology Approaches. *J Ilm Profesi Pendidik.* 2024;9(4):2721-2731. doi:10.29303/jipp.v9i4.2657
- 10) Thomas B. The Role of Purposive Sampling Technique as a Tool for Informal Choices in a Social Sciences in Research Methodes. *Just Agric.* Published online 2022.
- 11) Arieska PK, Herdiani N. Selection of Sampling Techniques Based on Relative Efficiency Calculations. *J Stat.* 2018;6(2):166-171. doi:https://doi.org/10.26714/jsunimus.6.2.2018.%25p
- 12) Usmadi U. Analytical requirements testing (Homogeneity test and normality test). *Inov Pendidik.* 2020;7(1). doi:https://doi.org/10.31869/ip.v7i1.2281
- 13) Sianturi R. Homogeneity test as a condition of analytical testing. *J Pendidikan, Sains Sos dan Agama.* 2022;8(1):386-397. doi:10.53565/pssa.v8i1.507
- 14) Sheng X, Liang K, Li K, Chi X, Fan H. Association between sports participation and resilience in school-attending students: a cross-sectional study. *Front Psychol.* 2024;15(April):1-8. doi:10.3389/fpsyg.2024.1365310
- 15) Chen N. The Influence of Extracurricular Sports Activities on the Psychological Resilience of Middle School Students. *Trans Soc Sci Educ Humanit Res.* 2024;11:78-84. doi:10.62051/xrfz4385
- 16) Sopacua TA, Novanto Y. Mental Toughness of Basketball Student-Athletes: Analyzing the Sources and Role of Social Support. *J Psikol Media Ilm Psikol.* 2019;21(2):38-50.
- 17) Annisa MN, Dewi DA, Furnamasari YF. The Role of Extracurricular Activities in Improving Students' Citizenship Character at School. *J Pendidik Tambusai.* 2021;5(3):7286-7291.
- 18) Rabwan Satriawan. Differences in Empathy of Students who Participate in Extracurricular Sports and those who Do not Participate in Extracurricular Sports. *J Pendidik Olahraga.* 2022;12(2):13-17. doi:10.37630/jpo.v12i2.1011
- 19) Agustina IO, Juliantika, Saputri SA, Putri N SR. The Role of Extracurricular Activities in the Development of Elementary School Students. *J Bintang Pendidik Indonesia.* 2023;1(4):86-96. doi:10.55606/jubpi.v1i4.2001
- 20) Dewi NK, Saragih S. The Effect of Scouting Extracurricular Activities on Adolescent Prosocial Behavior at Santa Ursula Junior High School Jakarta. *Pers Psikol Indones.* 2015;3(03). doi:10.30996/persona.v3i03.415
- 21) Harahap NH, Daharnis D, Syahniar S. Educational Contributions in Family and Participative Extracurricular on Students' Prosocial Behavior. *Int J Res Couns Educ.* 2020;4(1):40. doi:10.24036/00234za0002
- 22) Setiyowantono D, Prihanto JB. Comparison of Sportsmanship Between Students Participating in Volleyball Extracurricular Sports and Futsal Extracurricular Sports at SMK Sunan Giri Menganti. Published online 2015:479-484.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.