



Analysis of Elementary Students' Participation Levels in Hockey Extracurricular Activities

Rahma Dwi Aulia¹, Yogi Akin^{2*}, Wulandari Putri³

¹²³Elementary School Teacher Education Study Program, Faculty of Sports and Health Education,
Universitas Pendidikan Indonesia, Bandung, West Java, Indonesia

Keywords

Extracurricular;
Hockey; Student
Participation;
Elementary School

Abstract

This study aims to determine the level of participation of elementary school students in hockey extracurricular activities in Bandung City. The study used a quantitative approach with a descriptive method to describe the level of student participation objectively based on numerical data. The research sample consisted of 50 students who participated in hockey extracurricular activities. The instrument used was a closed questionnaire with 18 statements using the Guttman scale, where the answer "Yes" was given a score of 1 and "No" was given a score of 0. The data obtained were analyzed using descriptive statistics with the help of SPSS software through the calculation of total scores, averages, percentages, and frequency distributions. The results showed that the classification of categories, the level of student participation was in the moderate category. The frequency distribution showed that most students were in the moderate and low categories, thus indicating that student participation in hockey extracurricular activities was not optimal. Therefore, efforts are needed to improve through more structured coaching, increased student motivation, and support from the school and parents so that student participation can increase more optimally.

✉ Corresponding author :
E-mail: yogi.1498@upi.edu

INTRODUCTION

Physical education in elementary schools has an important role in supporting the overall physical, mental and social development of students (herdiyana & prakoso, 2016; sari et al., 2024). Through physical education, students develop not only motor skills but also values such as teamwork, discipline, and sportsmanship. In addition to intracurricular activities, schools provide extracurricular activities as a means of developing students' interests and talents outside of formal school hours. Extracurricular sports activities serve as a strategic platform for fostering active lifestyle habits from an early age. Therefore, optimizing extracurricular sports programs in elementary schools is a crucial part of the sports development system in education (arifudin, 2022; handryant & winarno, 2025).

One sport that is starting to develop in elementary schools is hockey. Hockey is a team sport that requires technical skills, motor coordination, concentration, and good teamwork (auliya & muhammad, 2020; nursaba et al., 2024). Unlike more commonly played sports such as soccer, hockey requires specific equipment and protective gear, which may present an additional participation barrier for some students. In Bandung, several elementary schools have implemented extracurricular hockey activities as part of their sports development programs. These programs have the potential to provide a foundation for the ongoing development of young athletes. However, the effectiveness of a program is determined not only by its existence but also by the level of consistent student participation in these activities.

Student participation reflects the level of active involvement, interest, and commitment to participating in an activity. High participation rates indicate that the program is able to attract interest and meet students' developmental needs (kim et al., 2017; mcpherson & schapiro, 2021). Conversely, low participation may indicate barriers such as lack of motivation, social support, or suboptimal activity management. This aligns with previous studies that revealed that the dominant factors influencing student participation in extracurricular sports activities were intrinsic motivation and school environmental support as the main factors determining student engagement (hariyadi & dewi, 2023). The study also explains that participation does not occur automatically, but is influenced by various internal and external factors.

Based on a study conducted by giffari & irawan, (2023), it was revealed that there is a relationship between extracurricular sports activities and the development of students' social behavior. And the study conducted putra et al., (2025) revealed that students' interest in participating in extracurricular sports activities at the secondary school level showed that interest and social support had an influence on the sustainability of participation. However, most of these studies have been conducted in the broader context of sports and at the secondary education level. Studies specifically examining students' interest in extracurricular hockey activities in elementary schools are still limited. This study differs from previous studies in that it focuses on hockey as a specific sport and examines the level of interest among elementary school students, thus filling a gap in the existing literature regarding extracurricular participation in specific sports at the elementary education level.

Based on this, a study is needed that specifically analyzes the level of participation of elementary school students in extracurricular hockey activities in Bandung City. The urgency of this research arises from the limited empirical data available on student participation in extracurricular hockey programs at the elementary school level. Without accurate information on participation rates, schools and sports organizations may face difficulties in evaluating program effectiveness, identifying barriers to student engagement, and developing appropriate strategies to increase participation. Given that extracurricular sports activities play a crucial role in promoting physical activity, social development, and long-term athlete development, understanding participation patterns among elementary school students is crucial. This research is important to provide an empirical overview of the level of student involvement as a basis for program evaluation. The novelty of this research lies in its specific focus on hockey at the elementary school level within the context of Bandung City. Furthermore, this study emphasizes quantitative mapping of participation levels as a basis for decision-making in extracurricular program development. Therefore, this research is expected

to provide scientific and practical contributions to the development of early childhood sports development in a more systematic and data-driven manner.

METHODS

This study uses a quantitative descriptive method with a survey approach, the subjects in this study were all elementary school students in Bandung City who participated in hockey extracurricular activities with a sampling technique using purposive sampling, namely a sample determination technique based on certain considerations or criteria that are in accordance with the research objectives. The sample criteria set were students in grades IV, V, and VI who were registered as members of the hockey extracurricular and actively participated in training for at least three months. The determination of these criteria aims to ensure that the selected respondents truly have experience and involvement in hockey extracurricular activities so that they can provide data relevant to the focus of the study. The total number of samples used in this study was 50 students who met the predetermined criteria. Although survey research generally uses around 100 respondents or more, the use of 50 samples in this study was considered appropriate because this research specifically focused on students who met certain purposive criteria, so the number of accessible respondents was limited. In addition, this study only involved elementary school students who actively participated in hockey extracurricular activities and had attended training for at least three months, which made the population relatively homogeneous. In quantitative descriptive survey research, a sample of 30–50 respondents is still considered sufficient when the purpose is to describe a phenomenon rather than make broad generalizations. Therefore, 50 students were considered adequate to represent the research objectives and provide relevant data regarding the level of student participation in hockey extracurricular activities in Bandung City. The instrument used in this study was adapted from research (Setiawan, 2013). The questionnaire contained 18 questions that were valid and reliable at 0.968 and the indicators were attendance, activeness, motivation, commitment, and participation in matches. Scoring of respondents' answers uses the Guttman scale, namely the answer "Yes" (Y) is given a score of 1 and the answer "No" (T) is given a score of 0. The analyzed data is then presented in the form of a frequency and percentage distribution table to facilitate interpretation of the results and drawing conclusions regarding the level of student participation in extracurricular hockey activities in Bandung City.

RESULTS AND DISCUSSION

This study aims to determine the level of participation of elementary school students in extracurricular hockey activities in Bandung City. Data were obtained through the distribution of questionnaires to 50 respondents with a total of 18 statement items using the Guttman scale, namely the answer "Yes" (Y) is given a score of 1 and the answer "No" (T) is given a score of 0. The scores of each respondent are then added up to obtain a total score with a value range of 0 to 18. Based on data processing, the following descriptive statistics were obtained.

Table 1. Descriptive Test

Variable	N	Maximum	Minimum	Mean	Std Dev
Participation	50	18	0	8,52	5,40

Based on the descriptive test **Table 1**, the minimum score is 0 and the maximum score is 18. The average value (mean) obtained is 8.52 with a standard deviation of 5.40. If converted into percentage form using the formula:

$$P = \frac{f}{N} \times 100$$

Then we get:

$$P = \frac{8,86}{18} \times 100 = 49,22\%$$

These results indicate that, in general, the level of student participation in extracurricular hockey activities is 49.22% of the ideal maximum score. Furthermore, the frequency distribution and participation level categories are shown in **Table 1**.

Determination of participation level categories is carried out based on descriptive data classification techniques according to (Fraenkel et al., 2022), by dividing the score range into five categories, namely:

Table 2. Student Participation Level Categories

Score Range	Category
0–3	Very Low
4–7	Low
8–11	Moderate
12–15	High
16–18	Very high

The determination of the student participation level category in this study was based on the total score range obtained from the questionnaire results with a minimum score of 0 and a maximum score of 18. The score range was then divided into five categories to facilitate data interpretation. Students who obtained a score between 0 and 3 were categorized as having a very low participation level, indicating very minimal involvement in hockey extracurricular activities. Scores of 4 to 7 were included in the low category, which illustrates that students have not participated optimally.

Furthermore, scores of 8 to 11 are categorized as moderate, indicating that students have participated in extracurricular activities but are not yet fully active or consistent. Scores of 12 to 15 are included in the high category, indicating good and fairly active involvement in activities. Students who obtain scores of 16 to 18 are categorized as having a very high level of participation, meaning that they demonstrate excellent attendance, involvement, and consistency in participating in extracurricular hockey activities. This categorization aims to provide a clearer picture of the overall level of student participation. Further details can be seen in **Table 2**.

Table 3. Participant Categories

Category	Frequency	Percentage
Very High	7	14%
High	8	16%
Medium	12	24%
Low	12	24%
Very Low	11	22%
Total	50	100%

Based on the **Table 3**, the most dominant categories are medium and low, with percentages of 24% each. Meanwhile, the very high category accounts for only 14%, and the very low category accounts for 22%.

The results of the study indicate that the level of participation of elementary school students in extracurricular hockey activities in bandung city is in the moderate category with an average percentage of 49.22%. This percentage indicates that students are generally involved in activities, but their level of involvement has not yet reached the high category. This condition indicates that student participation is still at a suboptimal level and requires further attention. The dominance of the moderate and low categories confirms that the majority of students have not demonstrated consistent and active involvement. Thus, the extracurricular hockey program still has room for improvement both in terms of implementation and coaching.

When viewed from the frequency distribution, the medium and low categories have the largest percentages compared to the other categories. This indicates that there are still a number of students who are not fully participating optimally in every training activity and

match. This suboptimal involvement can be seen from the frequency of attendance, the level of activity during practice, and the commitment to participating regularly. This condition reflects that students' interest and motivation in extracurricular hockey activities have not yet been fully developed. Therefore, systematic efforts are needed to improve the quality of students' experiences in participating in these activities.

Several factors that can influence the level of student participation include intrinsic motivation, parental support, and a supportive school environment (Khumasi et al., 2025; Utami et al., 2024). Intrinsic motivation plays an important role because students' personal interests and awareness are the main basis for actively participating in activities. (simatupang & bui, 2025; utami et al., 2024). In addition, parental support in the form of permission, moral encouragement, and supporting facilities also contributes to the sustainability of student participation (obizue et al., 2025; werang et al., 2024). Training facilities, infrastructure availability, and trainer competence are also external factors that cannot be ignored (kinyua, 2021; opiyo et al., 2025). If these factors are not optimally met, student participation levels tend to be moderate or even low.

The optional nature of extracurricular activities also influences the consistency of student participation (hariyadi & dewi, 2023). Because they are not mandatory, students have the freedom to participate or not participate in activities according to their interests. This causes attendance and engagement levels to fluctuate over time (suparman, 2025; ulwan, 2017). Furthermore, the presence of other activities outside of school or academic assignments can also influence the intensity of student participation in hockey extracurricular activities. Therefore, a strategy is needed to manage activities that are more engaging, enjoyable, and able to build a sense of belonging to the team.

Overall, the results of this study indicate that extracurricular hockey activities in bandung city have been running but have not yet achieved a high level of participation. These findings can be used as evaluation material for schools to improve the coaching and management systems for extracurricular activities. Improvement efforts can be made through innovative training programs, providing rewards to active students, and improving communication with parents. These steps are expected to increase student participation from moderate to high or even very high. Thus, extracurricular hockey activities can function optimally in supporting students' physical, social, and character development.

Table 4. Normality Test

Variables	N	Shapiro-Wilk Sig.	Description
Participation	50	0,087	Normally Distributed

Based on the results of the normality test using the Kolmogorov-Smirnov test, a significance value of 0.200 was obtained. This value is greater than 0.05, thus concluding that the total student participation score data is normally distributed.

Table 5. Homogeneity Test

Variables	N	Levene Statistic	df1	df2	Sig.	Description
Participation	50	1,247	1	48	0,270	Homogeneity

Based on the results of the homogeneity test using Levene's Test, a significance value of 0.270 was obtained. This value is greater than 0.05, so it can be concluded that the data has homogeneous variance. Thus, the data meets the assumption of homogeneity.

CONCLUSION

The findings of this study are in line with theories of student participation, which suggest that involvement in extracurricular activities is influenced by both internal and external factors. Based on the research results and data analysis regarding the level of participation of elementary school students in extracurricular hockey activities in Bandung City, it can be concluded that the level of student participation is in the moderate category with an average percentage of 49.22%. The frequency distribution results indicate that the majority of students

fall into the moderate and low categories, while the very high category has a smaller percentage. This indicates that student involvement in extracurricular hockey activities is not yet fully optimal and still requires improvement.

The findings of this study indicate that although extracurricular hockey activities have been implemented in schools, the level of student participation has not yet reached the high category overall. This condition can be influenced by various factors, both internal factors such as student motivation and interest, as well as external factors such as parental support, facilities, and the implemented coaching system. Therefore, it can be concluded that although student participation in extracurricular hockey activities in Bandung City remains adequate, it requires targeted intervention strategies. Therefore, to increase participation toward the high category, schools and stakeholders should implement more gamified and play-based hockey activities that are attractive to elementary school students while also reducing equipment-related barriers through the provision of school-funded hockey sticks and essential protective equipment.

REFERENCES

- Arifudin, O. (2022). Optimalisasi kegiatan ekstrakurikuler dalam membina karakter peserta didik. *JlIP- Jurnal Ilmiah Ilmu Pendidikan*, 5(3), 829–837.
- Auliya, R. F., & Muhammad, H. N. (2020). Peranan Tingkat Kondisi Fisik dan Keterampilan Bermain Hockey dalam Pencapaian Prestasi. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 8(3), 51–59.
- Fraenkel, J. R., Wallen, N., & Hyun, H. H. (2022). *How to design and evaluate research in education*. (11th Eds.). New York: McGraw Hill L.L.C. <https://books.google.co.id/books?id=neCZzgEACAAJ>
- Giffari, A. G., & Irawan, F. A. (2023). The Correlation Between Sports Extracurricular and Social Behaviour of Students in Junior High School 1, Jekulo, Kudus. *Sports Medicine Curiosity Journal*, 2(1), 1–7. <https://doi.org/10.15294/smcj.v2i1.61580>
- Handryant, R. Z. A., & Winarno, M. E. (2025). Upaya Optimalisasi Kualitas Program Ekstrakurikuler Hockey Di Jenjang Sekolah Menengah Atas. *PENJAGA: Pendidikan Jasmani Dan Olahraga*, 6(1), 188–198.
- Hariyadi, K., & Dewi, I. I. (2023). Faktor Dominan yang Mempengaruhi Partisipasi Siswa dalam Mengikuti Kegiatan Ekstrakurikuler Olahraga. *SPRINTER: Jurnal Ilmu Olahraga*, 4(3), 423–428. <https://doi.org/10.46838/spr.v4i3.424>
- Herdiyana, A., & Prakoso, G. P. W. (2016). Pembelajaran pendidikan jasmani yang mengacu pada pembiasaan sikap fair play dan kepercayaan pada peserta didik. *Jorpres (Jurnal Olahraga Prestasi)*, 12(1).
- Khumasi, K. K. N., Fadhilah, N., Putri, S. M., Hikmah, A. D. N., Nuraeni, E., & Winandika, G. (2025). Analisis pengaruh lingkungan sekolah terhadap minat dan motivasi belajar siswa sekolah dasar. *Dinamika Pembelajaran: Jurnal Pendidikan Dan Bahasa*, 2(3), 307–321.
- Kim, M., Cross, J., & Cross, T. (2017). Program development for disadvantaged high-ability students. *Gifted Child Today*, 40(2), 87–95.
- Kinyua, A. H. G. (2021). *When the trainer is untrained: stakeholder incapacitation in implementation and utilisation of open educational resources in Kenya*.
- McPherson, M., & Schapiro, M. (2021). *The student aid game: Meeting need and rewarding talent in American higher education*.
- Nursaba, S., Sidik, D. Z., Tafaqur, M., & Mulyana, M. (2024). The Effect of Imagery Training on Increasing the Confidence of Hockey Athletes. *Indonesian Journal of Sport Management*, 4(4), 448–459.
- Obizue, M. N., Olaobaju, S. S., & Oragwu, D. C. (2025). Moral Education and the Role of Families in Shaping Values for Sustainable National Development. *Int'l Journal Of Humanities, Economic Development And Contemporary Studies*, 1(2), 380–393.
- Opiyo, O. J., Nangendo, I., & Ali, S. (2025). The Availability of the Physical Facilities and Resources for Technical Training and Skills Acquisition in Vocational Training Centres in Tana River County. *J Adv Educ Philos*, 9(4), 160–166.
- Putra, M. H. O., Indrayana, B., & Prabowo, B. Y. (2025). *Survei Minat Siswa Dalam Mengikuti Kegiatan Ekstrakurikuler Olahraga di SMA Negeri 12 Di Kabupaten Bungo*. 5(1), 19–29. <https://doi.org/10.22437/sc.v5i1.31367>
- Sari, Y. Y., Ulfani, D. P., & Ramos, M. (2024). Pentingnya pendidikan jasmani olahraga terhadap anak usia sekolah dasar. *Jurnal Tunas Pendidikan*, 6(2), 478–488.
- Setiawan. (2013). *Tingkat Partisipasi Siswa Dalam Mengikuti Kegiatan Ekstrakurikuler Olahraga di Sekolah Dasar se-Gugus Gili Kelir Kecamatan Bobotsari Kabupaten Purbalingga Tahun Ajaran 2012/2013*. Universitas Negeri Yogyakarta.
- Simatupang, J. K. N., & Bui, T. C. (2025). Motivasi dan Emosional Berperan Penting dalam Pembelajaran Pendidikan bagi Peserta Didik. *Jurnal Teologi Wesley*, 2(1).

- Suparman, S. (2025). Analisis Dampak Keterlibatan Ekstrakurikuler Olahraga terhadap Aktivitas Fisik Harian Siswa Madrasah Ibtidaiyah. *Praktisi Nusantara*, 1(2), 1–10.
- Ulwan, A. N. (2017). *Pengaruh dukungan sosial terhadap keterlibatan siswa kelas VIII dalam mengikuti ekstrakurikuler Pramuka di MTSN Aryojeding Rejotangan Tulungagung*. Universitas Islam Negeri Maulana Malik Ibrahim.
- Utami, D. S., Putri, S. A., Suriansyah, A., & Cinantya, C. (2024). Pentingnya motivasi dalam meningkatkan hasil belajar peserta didik sekolah dasar. *MARAS: Jurnal Penelitian Multidisiplin*, 2(4), 2071–2082.
- Werang, B. R., Agung, A. A. G., Pio, R. J., Jim, E. L., Asaloei, S. I., Imbang, D., Leba, S. M. R., & Angelianawati, D. (2024). Exploring the effect of parental support and school environment on student academic achievement: A survey study. *International Journal of Religion*, 5(5), 345–357.