2024, Retos, 55, 849-856

Implementation of Archery Class Management at the Pre-Extracurricular Program Stage To Increase Elementary School Students' Interest

Implementación de la gestión de clases de tiro con arco en la etapa del programa preextracurricular para aumentar el interés de los estudiantes de primaria

*Khairul Hamsyah, *Soni Nopembri, *Amat Komari, *Hendra Setyawan, *Hedi Ardiyanto Hermawan, **Özgür Eken, ***Sugiyanto, ****Abdul Aziz Purnomo Shidiq, *****Ratko Pavlovic, ******Francesca Latino, *******Francesco Tafuri, ******** Nuridin Widya Pranoto, *********Muhammad Imam Rahmatullah

*Universitas Negeri Yogyakarta (Indonesia), ** Inonu University (Turkey), ***Universitas Negeri Malang (Indonesia), ****Universitas Sebelas Maret (Indonesia), *****University of East Sarajevo (Bosnia and Herzegovina), ******Pegaso University (Italy), ******Niccolò Cusano University (Italy), *******Universitas Negeri Padang (Indonesia), Universitas Riau (Indonesia)

Abstract. One of the non-academic extracurricular activities that can be developed in elementary schools is archery, because it has many benefits at the stage of student growth and development. This research is quantitative with a one group pretest-posttest pre-experimental design. The research was carried out at SD Muhammadiyah Jogokaryan with subjects aged 10-12 years. The sample was taken using a simple random sampling method in classes IV - VI totaling 15 students. The interest data collection technique is by giving a questionnaire before and after the implementation of the archery extracurricular pre-program. The implementation of the extracurricular archery pre-program is carried out by students practicing archery at a distance of 4-8 meters by shooting 6 arrows in each session and carried out in 12 sessions. The results of the Wilcoxon test on the output ranks have a negative rank value between the pre-test and post-test at a value (n) of 2, a mean rank of 3.50 and a sum rank of 7.00, meaning there is no decrease from the pre-test value to the post-test value. The positive rank value between the pre-test and post-test is a value (n) of 13, meaning that 13 students experienced an increase in interest scores from the pre-test score to the post-test score. The mean rank increase in value is 8.69 and the sum of ranks is 113.00. Meanwhile, the tie value is 0, meaning that there are no pairs of data that remain the same between the pre-test and post-test. Apart from that, it is known that the significance value is 0.003 <0.05, meaning that there is a significant increase in the results of student interest scores between the pretest and posttest. Furthermore, based on the results of the n-gain score test, the average value is 0.58, so it is considered moderate effectiveness. The conclusion is that the implementation of archery class management at the pre-extracurricular program stage has a significant effect on increasing students' interest in participating in archery extracurriculars. However, the effectiveness of implementing archery training at the pre-extracurricular program stage in increasing interest is included in the moderate effectiveness category which is allegedly due to limited socialization and facilities and infrastructure for archery sports. The factors that influence archery performance include practice management, teaching methods, class management, and student interest. Meanwhile, teacher professionalism in classroom management also contributes significantly to the effectiveness of learning and increasing student interest. External support such as the school environment and parents also have a significant influence on student participation in extracurricular activities.
Keywords: Class management, Pre-extracurricular program, Interest in archery, students.

Resumen. Una de las actividades extracurriculares no académicas que se pueden desarrollar en las escuelas primarias es el tiro con arco, debido a que tiene muchos beneficios en la etapa de crecimiento y desarrollo de los estudiantes. Esta investigación es cuantitativa con un diseño preexperimental pretest-postest de un grupo. La investigación se llevó a cabo en SD Muhammadiyah Jogokaryan con sujetos de entre 10 y 12 años. La muestra se tomó mediante el método de muestreo aleatorio simple en los grados IV - VI con un total de 15 estudiantes. La técnica de recolección de datos de interés es mediante la aplicación de un cuestionario antes y después de la implementación del preprograma extracurricular de tiro con arco. La implementación del preprograma extraescolar de tiro con arco se realiza mediante la práctica de tiro con arco a una distancia de 4-8 metros disparando 6 flechas en cada sesión y se realiza en 12 sesiones. Los resultados de la prueba de Wilcoxon en los rangos de salida tienen un valor de rango negativo entre la prueba previa y la prueba posterior con un valor (n) de 2, un rango medio de 3,50 y un rango suma de 7,00, lo que significa que no hay disminución. desde el valor previo a la prueba hasta el valor posterior a la prueba. El valor de clasificación positivo entre la prueba previa y la prueba posterior es un valor (n) de 13, lo que significa que 13 estudiantes experimentaron un aumento en las puntuaciones de interés desde la puntuación previa a la prueba hasta la puntuación posterior a la prueba. El aumento medio de rango en valor es 8,69 y la suma de rangos es 113,00. Mientras tanto, el valor del empate es 0, lo que significa que no hay pares de datos que permanezcan iguales entre el pretest y el postest. Aparte de eso, se sabe que el valor de significancia es 0,003 <0,05, lo que significa que hay un aumento significativo en los resultados de las puntuaciones de interés de los estudiantes entre el pretest y el postest. Además, según los resultados de la prueba de puntuación de n-gain, el valor medio es 0,58, por lo que se considera una eficacia moderada. La conclusión es que la implementación de la gestión de clases de tiro con arco en la etapa del programa preextracurricular tiene un efecto significativo en el aumento del interés de los estudiantes en participar en actividades extracurriculares de tiro con arco. Sin embargo, la efectividad de implementar el entrenamiento de tiro con arco en la etapa del programa pre-extracurricular es cada vez más interesante se incluye en la categoría de efectividad moderada, lo que supuestamente se debe a la socialización y las instalaciones e infraestructura limitadas para los deportes de tiro con arco. Los factores que influyen en el rendimiento del tiro con arco incluyen la gestión de la práctica, los métodos de enseñanza, la gestión de la clase y el interés de los estudiantes. Mientras tanto, la profesionalidad docente en la gestión del aula también contribuye significativamente a la eficacia del aprendizaje y al aumento del interés de los estudiantes. El apoyo externo, como el entorno escolar y los padres, también tiene una influencia significativa en la participación de los estudiantes en actividades extracurriculares.
Palabras clave: Gestión de clase, Programa preextracurricular, Interés por el tiro con arco, estudiantes.

Fecha recepción: 12-03-24. Fecha de aceptación: 17-04-24
Nuridin Widya Pranoto
nuridin@fik.unp.ac.id

Introduction

Extracurricular activities at school are one way to accommodate and develop the potential of students while at school. Implementation of extracurricular activities in schools is part of education in accordance with the Education and Culture Regulations of the Republic of Indonesia Number 62 of 2014 concerning Extracurricular Activities in Primary Education and Secondary Education(Ministry of Education and Culture, 2014). The regulations state that extracurricular activities are activities carried out outside curricular activity hours. Curricular activities in the teaching and learning process in class can take the form of subject areas of study at school. Meanwhile, extracurricular activities are a place for student activities outside of curricular activities. This extracurricular activity can be carried out at every school institution from kindergarten to high school level according to the needs and potential that you want to develop.

Educational institutions at schools have accommodated all the needs of students to hone each student's skills and abilities. This also includes educational institutions at the elementary school (SD) level as a forum for developing the potential of students by improving the quality of education from an academic and non-academic perspective. Judging from academics, of course schools always improve the quality of education and improve the learning process. From a non-academic perspective, this can be done through extracurricular activities. Extracurricular activities are usually carried out outside regular class hours to broaden knowledge, attitudes and skills in various fields, namely sports, science, social sciences, religion and the arts. Extracurricular programs provide positive benefits for student development(Annisa et al., 2023). Extracurricular activities can be used as an effort to develop students' character and skills. Character development includes 1) tolerance; 2) discipline; 3) independence; 4) love peace; 5) care about the environment; 6) social concern; 7) responsibility; 8) self-confidence; and others. As well as skills which include 1) creative; 2) collaboration; 3) communication; 4) think critically (Azizah & Lu'luil Maknun, 2022).

One of the non-academic extracurricular activities that can be developed in the field of sports at elementary school level is archery, because sCurrently, archery is a sport that is growing in popularity in society and also has many benefits that are needed at the stage of growth and development of teenagers(Setyawan et al., 2023). Archery activities will have a positive impact on increasing concentration and stability of visual balance(Gündüz et al., 2017);(Ustun & Tasgin, 2020);(Wada & Takeda, 2020). With extracurricular activities, archery is expected to be able to develop various positive things, including developing students' interests and talents which may have been hidden or not yet emerged.However, for the initial stage, a strategy is needed to implement archery class management at the pre-extracurricular program stage first. This was done to determine the response and level of student participation in participating in archery extracurricular activities. Apart from that, it is also to determine students' potential interests and talents in the sport of archery, as well as mapping the implementation of archery extracurricular activities as expected.

Increasing sporting performance at an early age is one of the main focuses in developing athletic talent in various sports, including archery. In the Yogyakarta region of Indonesia, the potential for developing talented young athletes in archery is very large, however there are obstacles to elementary school students' interest in archery extracurricular activities, due to the lack of archery sports experts and the absence of archery sports facilities and infrastructure. Asresearch result (Setyawan et al., 2024) who recommend that PE teachers increase their competence in the field of archery and that schools provide the necessary facilities and infrastructure. Apart from that, research (Setyawan et al., 2023) also concluded that support for archery sports equipment is needed in schools or universities that hold archery sports classes, so that they can provide maximum achievement or learning results in archery skills for beginner archers. Referring to this problem, the lack of support from experts and archery facilities in schools will result in students' low interest in participating in and practicing archery.

Research related to archery has been done by several researchers, among others: (Barrera et al., 2020); (Roldan et al., 2021); (Wibowo et al., 2024); (Setyawan et al., 2024); (Yachsie et al., 2024). However, there has not been any research that discusses the implementing archery class management specifically designed for the pre-extracurricular program stage, in an effort to increase the interest of elementary school students in Yogyakarta in archery extracurricular activities. Thus, in order to increase students' interest in participating in archery, this research aims to test the effectiveness of implementing archery class management specifically designed for the pre-extracurricular program stage, in an effort to increase the interest of elementary school students in Yogyakarta in archery extracurricular activities. This research will also evaluate how approaches taken before students begin extracurricular activities can influence the decision to participate in archery and maintain interest in the long term. Apart from that, this research also aims to identify factors that can increase students' potential to become talented archery athletes and improve archery sports achievements in the Yogyakarta region in the future.

Methods

This research is a quantitative research with a one group pretest-posttest pre-experimental design. The research was carried out at the Muhammadiyah Jogokaryan Elementary School (SD) Yogyakarta City with subjects aged 10-12 years who took part in a pre-curricular archery sports program. The research sample was taken using a simple random sampling method in classes IV - VI totaling 15 students. The technique for collecting interest data is by giving a question-

naire before and after the implementation of the archery extracurricular pre-program. The interest measurement instrument uses a Likert scale with ratings: 1) Very High (ST) with a value of 5; 2) High (T) is worth 4; 3) Medium (S) is worth 3; 4) Low (R) is worth 2; and 5) Very Low (SR) with a value of 1. The instrument of interest is prepared based on theoretical studies which have been adapted to measure each indicator. The instrument of interest has been tested for validity (Product Moment Pearson Correlation SPSS) and reliability (Cronbach's Alpha SPSS). The validity test results for all items have an r-calculated value greater than the r-table of 0.514 and a Sig value. is 0.000 < 0.05 at a significance level of 5%, so it is declared valid as in Table 1. Reliability test results for all items have a value of (α) > 0.6, so it is declared reliable or consistent as in Table 2.

Table 1.
Results of Validity Analysis of Statement Items

Question	r value$_{table}$	r value$_{count}$	Information
1.	0.514	0.817	Valid
2.	0.514	0.757	Valid
3.	0.514	0.825	Valid
4.	0.514	0.791	Valid
5.	0.514	0.616	Valid
6.	0.514	0.762	Valid
7.	0.514	0.690	Valid
8.	0.514	0.869	Valid
9.	0.514	0.826	Valid
10.	0.514	0.788	Valid

Table 2.
Results of Reliability Analysis of Statement Items

Question	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Information
1.	26.80	85,029	,775	0.915	Reliable
2.	27.20	85,600	,700	0.918	Reliable
3.	27.07	81,638	,774	0.914	Reliable
4.	28.40	83,543	,735	0.916	Reliable
5.	27.73	88,067	,528	0.927	Reliable
6.	27.07	84,781	,702	0.918	Reliable
7.	27.53	84,695	,606	0.923	Reliable
8.	28.20	79,600	,828	0.911	Reliable
9.	28.13	81,552	,776	0.914	Reliable
10.	27.87	81,695	,725	0.917	Reliable

The effectiveness of the implementation of archery sports class management at the pre-extracurricular program stage on elementary school students' interest in participating in the archery extracurricular program involves four aspects of management functions including: 1) planning archery sports classes at the pre-extracurricular program stage, 2) organizing archery sports classes at the pre-program stage extracurricular 3) implementation of archery sports classes at the pre-extracurricular program stage, and 4) evaluation/assessment of archery sports classes at the pre-extracurricular program stage.The implementation/implementation part is carried out in several steps. In the archery extracurricular pre-program implementation activity, students practice archery at a distance of 4-8 meters by shooting 6 arrows in each session and are carried out in 12 sessions. The procedure for carrying out archery training is carried out with the following explanation:

1. Students stand on the shooting line to shoot 6 arrows in each session. In this arrow shooting activity/exercise, the student's gaze must focus or concentrate on the shooting target.
2. After allAfter the student has finished shooting the arrow, the designated referee and the student both calculate their respective scores.
3. Scoredetermined based on the results of arrows shot that stick into the target's face object with a yellow score of 10 - 9, red 8 - 7, and blue 6 - 5.
4. After everything is finishedThe shooting scores obtained are then added up and converted into a numerical value on a scale of 1-100 to determine their level of archery achievement.

The data analysis technique used is non-parametric Wilcoxon statistical test analysis and N-gain score. The first data analysis technique uses non-parametric Wilcoxon statistical test analysis with the SPSS program to determine the effectimplementation of sports class management at the pre-extracurricular program stage on elementary school students' interest in participating in extracurricular programs. The Wilcoxon non-parametric statistical test analysis at this stage can be described as follows (Table 3):

Table 3.
Pre-experimental designs (one-group pretest-posttest)

Pretest	Treatment	Posttest
O1	X	O2

Information:
O1 : ResultsPretest
X : Implementation of Archery Class Management at the Pre-Extracurricular Program Stage
O2 : ResultsPosttest.

Data analysis techniquethe second uses N-gain Score Test analysis to determine effectivenessimplementation of archery sports class management at the pre-extracurricular program stage on elementary school students' interest in participating in extracurricular programs. Analysis of the N-gain Score Test at this stage uses the following formula:

$$g \frac{Sf - Si}{Smax - Si}$$

Information:
g = Gain

Sf = Post-test average value
Si = Average pre-test score
Smax= Maximum value
The effectiveness criteria use criteria according to (Hake, 1998) as (Table 4) below:

Table 4.
Effectiveness Criteria

Value g	Criteria
G ≥ 0.7	Tall
0.3 ≤ G < 0.7	Currently
G < 0.3	Low

Results

The following is a presentation of the results of quantitative analysis of students' pre-test and post-test concentration scores on the implementation of archery sports class management at the pre-extracurricular program stage on student interest. The results of the quantitative analysis as shown in (Table 5) show that the descriptive statistics pre-test data has a minimum value of 34, a maximum value of 96, a mean value of 61.33, and a standard deviation of 20.337. As for the post-test results, it is known that the minimum value is 54, the maximum value is 100, the mean value is 84.53, and the standard deviation value is 19.635.

Tabel 5.
Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	15	34	96	61.33	20,237
Posttest	15	54	100	84.53	19,635
Valid N (listwise)	15				

After carrying out descriptive statistical calculations, a normality test is then carried out as a requirement for carrying out parametric statistical tests. However, the results of the overall normality test of the data on the Kolmogorov-Smirnov output and the Shapiro-Wilk test were (sig.) < 0.05, indicating that the data was not normally distributed, so the non-parametric Wilcoxon statistical test was carried out as a substitute for the paired sample t-test.

The results of the Wilcoxon non-parametric statistical test analysis on the results of the experimental class Ranks output are as shown in (Table 6). The Negative Ranks value (negative difference) between the results of student interest scores between the pre-test and post-test at a value (N) of 2, Mean Rank 3, 50 and Sum Rank 7.00, which means that there is no decrease from the pre test score to the post test score. Positive Ranks (positive difference) between students' interest scores between pre-test and post-test at a value (N) of 13 means that 13 students experienced an increase in interest scores from pre-test scores to post-test scores. The Mean Rank or average increase is 8.69 and the Sum of Ranks (positive ranking) is 113.00. Meanwhile, Ties (similarity in pre-test and post-test scores) is 0, meaning there are no pairs of data that remain the same between the pre-test and post-test.

Tabel 6.
Rank

Ranks				
		N	Mean Rank	Sum of Ranks
Posttest - Pretest	Negative Ranks	2a	3.50	7.00
	Positive Ranks	13b	8.69	113.00
	Ties	0c		
	Total	15		
a. Posttest < Pretest				
b. Posttest > Pretest				
c. Posttest = Pretest				

The results of the Test Statistics output for the experimental class are as shown in (Table 7), the significance value is 0.003 < 0.05, so it can be concluded that there is a significant increase in student interest scores between before and after being given the implementation of archery sports training at the pre-extracurricular program stage.

Tabel 7.
Test Statistics

Test Statistics	
	Posttest - Pretest
Z	-3.016b
Asymp. Sig. (2-tailed)	,003
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

The effectiveness of implementing archery sports training at the pre-extracurricular program stage in increasing elementary school students' interest can be determined using N-gain score test analysis. The n-gain score test analysis is designed to determine the effectiveness of applying a particular model or method to the results. Based on the results of the N-gain score test calculation as in (Table 8), it is known that the average n-gain score is 0.58 so it is included in the medium effectiveness category. The minimum N-gain value is -0.33 and the maximum is 1.00. Thus, the effectiveness of implementing archery sports training at the pre-extracurricular program stage in increasing interest is included in the medium effectiveness category.

Table 8.
N-Gain Score Test Results

No	Name	Pretest	Conversion	Implementation of Exercises 1-12 At the Pre Program Stage Archery Extracurricular												Posttest	Conversion	N-Gain
				1	2	3	4	5	6	7	8	9	10	11	12			
1	MNH	24	48	46	40	48	47	49	32	51	50	42	53	53	57	43	86	0.73
2	RAF	28	56	47	45	41	49	49	52	47	48	55	46	46	55	50	100	1.00
3	LAP	28	56	48	43	29	34	36	45	47	44	36	28	29	36	33	66	0.23
4	RSN	22	44	48	45	53	46	57	51	57	50	53	57	53	49	41	82	0.68
5	ASP	41	82	25	16	37	35	37	35	48	28	36	48	40	35	38	76	-0.33
6	CAN	34	68	32	43	43	40	50	44	55	38	46	52	41	45	32	64	-0.13
7	RY	25	50	32	26	13	36	23	18	47	46	41	42	34	22	27	54	0.08
8	AND	41	82	23	40	27	23	28	33	51	55	49	31	40	23	44	88	0.33

9	IP	24	48	37	37	26	43	41	50	39	40	43	32	39	38	27	54	0.12
10	MH	42	84	49	47	55	55	46	51	40	37	48	58	58	57	50	100	1.00
11	ARF	44	88	56	47	54	55	49	57	54	55	52	53	51	54	50	100	1.00
12	IGN	17	34	39	49	47	51	49	49	46	52	50	56	50	46	50	100	1.00
13	GGP	24	48	52	53	52	53	49	47	38	47	43	46	36	39	49	98	0.96
14	AAJ	18	36	40	40	47	35	37	38	50	45	39	30	38	47	50	100	1.00
15	DTH	48	96	38	44	49	44	42	53	50	39	27	41	37	34	50	100	1.00
Average N-Gain																		0.58
Minimum N-Gain																		-0.33
Maximum N-Gain																		1.00

Discussion

Based on the results of the Wilcoxon non-parametric statistical test analysis, the output ranks of the experimental class have a negative rank value between the pre-test and post-test at a value (n) of 2, mean rank 3.50 and sum rank 7.00, which means there is no decrease from pre test score to post test score. The positive rank value between the pre-test and post-test is a value (n) of 13, meaning that 13 students experienced an increase in interest scores from the pre-test score to the post-test score. The mean rank of the increase was 8.69 and the sum of ranks was 113.00. Meanwhile, ties (similarity in pre-test and post-test scores) is 0, meaning there are no pairs of data that remain the same between pre-test and post-test. Apart from that, the results of the test statistics output for the experimental class have a significance value of 0.003 < 0.05, meaning that there is a significant increase in the results of students' interest scores between before and after being given the implementation of archery sports training at the pre-extracurricular program stage. These results indicate that the implementation of archery class management at the pre-extracurricular program stage can increase elementary school students' interest in participating in extracurricular archery sports.This is also supported by several previous studies regarding efforts to explore students' interests and talents through extracurricular programs at school. Study (Rahimova, 2022) Extracurricular activities increase students' interest in learning. Study (Ovidiu & Teodor, 2022) stated that the importance of extracurricular sports activities for student development. Participation in extracurricular activities increases students' learning motivation(Machunde & Ilomo, 2022). Participation in extracurricular activities increases academic success (Tiep, 2023).Further research (Silvia, 2022) which focuses on the impact of non-formal education on the personality development of primary school students, has suggestedsuggestions for non-formal education as the development of individual characteristics. It can be concluded that the implementation of effective management in extracurricular pre-program classes, especially archery, can increase elementary school students' interest in participating in archery extracurricular activities, play a significant role in exploring students' interests and talents, and increase learning motivation. Involvement in extracurricular sports and similar sporting activities is related to students' holistic development, including academic and non-academic aspects, where this has been supported by previous research which shows that non-formal education, such as extracurriculars, contributes to the development of students' individual characteristics.

There are many factors that can influence archery performance, both in terms of training or teaching management, class management, application of methods, and student/athlete interest in archery. The role of teachers is very much needed in managing learning, both theoretical learning in the classroom and practical learning in the open field. Research (Rohiyatun & Mulyani, 2017) concludes that there is a relationship between classroom management procedures and the smoothness of the teaching and learning process. Classroom management activities are intended to create and maintain the atmosphere and conditions of the class, so that the teaching and learning process can take place effectively and efficiently (Wahid et al., 2018). Teachers and class managers have a main role in creating an effective class (Hidayat et al., 2020). Supporting factors for classroom management strategies include: curriculum factors, facilities, teachers, students and families (Wati & Trihantoyo, 2020). The success of learning in the classroom cannot be separated from the teacher's professionalism in terms of classroom management (Amalia, 2019). It is hoped that teachers in schools will maximize classroom management by using the teaching aids they have in order to maximize students' comprehension of the material presented (Hafinda & Armanisah, 2021). Apart from that, the interest factor is very important to increase student involvement in regular practice in archery extracurricular activities. Achievement motivation, self-efficacy, self-regulation, school environment, and social support have a significant influence on sports achievement (Abriadi Muhara et al., 2022). School factors and parental support have a major influence on adolescent students' participation in sports activities (Yangyang et al., 2023). As research (Irfan et al., 2022) entitled introduction of archery for elementary school students, found the results of an increase in people's knowledge and skills about archery, as well as increasing interest in archery. Thus it can be concluded that achievement in archery is influenced by various factors, which include training management, teaching, class management, learning methods, and student or athlete interests. The teacher's role in managing theoretical and practical classes is very important to create conditions that support the effectiveness and efficiency of the teaching and learning process. Teacher professionalism in classroom management contributes to the success of classroom learning as well as the use of teaching aids that can increase student understanding. Besides that, personal factors such as achievement motivation, self-efficacy, self-regulation, and external factors such as the

school environment and social support, including support from parents, significantly influence student participation and achievement in archery. Furthermore, by introducing archery to students in extracurricular activities in elementary schools, they can improve their knowledge, skills,

Based on the results of the effectiveness level test using n-gain score analysis, it is known that the average n-gain score is 0.58 so it is included in the medium effectiveness category. The minimum N-gain value is -0.33 and the maximum is 1.00. Thus, the effectiveness of implementing archery sports training at the pre-extracurricular program stage in increasing interest is included in the medium effectiveness category. This is also in line with research (Nugroho & Jariono, 2023) conducted among students, that the interest of sports education students in archerystill low. Another research conducted (Pratama et al., 2022) found that 21% of students had high interest and 40% of students had low interest in archery. However, the quantitative results of the implementation of archery class management at the pre-extracurricular program stage have resulted in increased interest in student participation in archery extracurricular programs in elementary schools. Therefore, it is recommended to increase training and discipline programs to increase interest and motivation in extracurricular sports (Darajat et al., 2022). As for the application of class management or teaching methods, there is an influence of the application of a method or technique in archery on archery accuracy results (Faqiha & Pratama, 2022); (Rahmatika, 2022); and (Ardiyanto, 2022). The findings from observations by researchers in the field have also provided a concluding answer that the effectiveness results in the medium level category are influenced by the lack of socialization and limited equipment and facilities for archery extracurricular activities in elementary schools in the Yogyakarta region, Indonesia. Thus, it is necessary to introduce the sport of archery through extracurricular activities, as well as the provision of archery sports facilities and infrastructure at the elementary school level in the Yogyakarta region, Indonesia.

Conclusion

The implementation of pre-extracurricular classroom management, especially in archery, can increase elementary school students' interest in participating in archery extracurricular activities. Wilcoxon non-parametric statistical test analysis indicated a significant increase in student interest after being given the implementation of archery sports training, with the majority of students showing an increase in interest. Extracurricular activities play an important role in exploring students' interests and talents as well as increasing learning motivation and academic success. Thus, it can be concluded that the implementation of archery class management at the pre-extracurricular program stage has a significant effect on increasing students' interest in participating in archery extracurriculars. However, the effectiveness of implementing archery sports training at the pre-extracurricular program stage is in the medium effectiveness category due to limited socialization and infrastructure.

Interest in archery varies, with some students showing high interest while others show low interest. Factors that influence archery performance include practice management, teaching methods, classroom management, and student interest. Teacher professionalism in classroom management contributes significantly to the effectiveness of learning and increasing student interest. External support such as the school environment and parents also have a significant influence on student participation in extracurricular activities. Efforts are needed to improve training programs and discipline to further increase student interest and motivation in archery. Limited socialization and facilities are challenges in increasing the effectiveness of extracurricular archery programs, especially in elementary schools in the Yogyakarta region, Indonesia.

Acknowledgment

The author would like to thank all the leaders of study programs, faculties, and Yogyakarta State University (UNY) who have provided facility support in this research. We also thank students who have agreed to be sampled in this study.

Conflicts of interest

The authors declare no conflicts of interest.

References

Abriadi Muhara, Husain Syam, & Abdullah Sinring. (2022). Determinant Factors of Sports Achievement of State Senior High School Students Special for Sports Gifted South Sulawesi. *Jurnal Multidisiplin Madani*, *2*(11 SE-Articles), 3919–3930. https://doi.org/10.55927/mudima.v2i11.1874

Amalia, H. (2019). Implementation of Class Management as an Effort to Increase the Effectiveness of Islamic Religious Education Learning. *At-Tajdid: Jurnal Ilmu Tarbiyah*, *8*(1), 150–173. https://ejournal.isimupacitan.ac.id/index.php/tajdid/article/view/160

Annisa, A., Anatasya, E., Suargana, L., & T, P. R. A. (2023). Extracurricular Planning and Implementation Strategy in Elementary Schools: Perspectives from Public Elementary Schools and Private Elementary Schools. *Jurnal Pendidikan Tambusai*, *7*(2 SE-Articles of Research), 19150–19154. https://doi.org/10.31004/jptam.v7i2.9412

Ardiyanto, A. Z. (2022). *The Effect of Basic Technique Training Using Rubber Ropes on Archery Accuracy in Early Childhood Club Win Archery*. Universitas Bina Bangsa Getsempena. https://repository.bbg.ac.id/handle/1211

Azizah, F. K., & Lu'luil Maknun. (2022). Character Development and Student Skills Through Extracurricular Activities. *Tadzkirah : Jurnal Pendidikan Dasar*, *5*(2 SE-), 1–15. https://doi.org/10.55510/tadzkirah.v3i2.133

Barrera, G. F. F., Torres, S. R. J., Díaz, C. C. de J. C., Vásquez, D. C. D., & Millar, D. F. V. (2020). Effects of a Postural Control Exercise Program on Body Balance and Accuracy of Throwing in Archery. *Retos*, *37*, 291–296. https://doi.org/10.47197/retos.v37i37.70956

Darajat, I. R., Hartati, H., & Aryanti, S. (2022). Students' Interest and Motivation Survey Oon Basketball Extracurricular Activities at SMP Negeri 5 Indralaya Utara. *Journal Physical Education, Health and Recreation*, *7*(1). https://doi.org/https://doi.org/10.24114/pjkr.v7i1.38886

Faqiha, F. Y., & Pratama, R. S. (2022). The Influence of Training Methods (Blind Shoot and Blank Shoot) and Kinesthetic Perception on the Archery Accuracy of Central Java Archery Athletes. *Unnes Journal of Sport Sciences*, *6*(2), 143–150. https://doi.org/https://doi.org/10.15294/ujoss.v6i2.57125

Gündüz, N., Keskin, M. T., & Erduğan, F. (2017). Investigation of Participation Motivations in Exercises of Students Participating in Archery in Extra Curricular Activities. *Universal Journal of Educational Research*, *5*(10), 1764–1771. https://doi.org/10.13189/ujer.2017.051014

Hafinda, T., & Armanisah. (2021). Teacher Skills for Managing Classes: Efforts to Improve Student Learning Achievement. *Al-Ihtirafiah: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 167–182. https://www.ejournal.staindirundeng.ac.id/index.php/ihtirafiah/article/view/699

Hake, R. R. (1998). Interactive-Engagement Vs Tradition-Al Methods: A Six-Thousand-Student Survey Of Mechanics Test Data For Introductory Physics Courses. *American Journal of Physics*, *61*(1), 64–74. https://doi.org/https://doi.org/10.1119/1.18809

Hidayat, W., Jahari, J., & Shyfa, C. N. (2020). Class Management in Improving the Learning Process in Madrasas. *Jurnal Pendidikan UNIGA*, *14*(1), 308–317. https://journal.uniga.ac.id/index.php/JP/article/view/913

Irfan, A., Alim, A., & Minarti S, A. (2022). Leading Classroom Management Strategies in Improving Student Learning Achievement. *Sahabat Sosial: Jurnal Pengabdian Masyarakat*, *1*(1 SE-), 5–9. https://doi.org/10.59585/sosisabdimas.v1i1.1

Kemdikbud. (2014). *Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 62 concerning Extracurricular Activities in Primary and Secondary Education*. https://jdih.kemdikbud.go.id/sjdih/siperpu/dokumen/salinan/Permendikbud Nomor 62 Tahun 2014.pdf

Machunde, L. E., & Ilomo, O. (2022). Effects of Extracurricular Activities on Students' Motivation to Learn among Seventh day Adventist Affiliated Secondary Schools in Morogoro, Tanzania. *East African Journal of Education and Social Sciences*, *3*(5). https://eajess.ac.tz/2022/11/18/effects-of-extracurricular-activities-on-students-motivation-to-learn-among-seventh-day-adventist-affiliated-secondary-schools-in-morogoro-tanzania/

Nugroho, A. W., & Jariono, G. (2023). Analysis of Sports Education Students Interest in Muhammadiyah University of Surakarta in Archery Sports. *Kinestetik : Jurnal Ilmiah Pendidikan Jasmani*, *7*(1 SE-Articles), 40–51. https://doi.org/10.33369/jk.v7i1.26085

Ovidiu, B., & Teodor, G. (2022). Pregătirea Sportivă A Elevilor Prin Activităţi Extracurriculare. *Sport Olimpism Sănătate: Congresul Ştiinţific Internaţional*. https://doi.org/https://doi.org/10.52449/soh22.03

Pratama, A. K., Afriyuandi, A. R., Rizkiana, M. S., & Kurniawati, A. (2022). Survey in Archery Interest at Suryakancana University of Cianjur. *Jurnal Maenpo*, *12*(1). https://doi.org/https://doi.org/10.35194/jm.v12i1.2302

Rahimova, M. A. (2022). Characterıstıcs of the Organızatıon of Extracurrıcular Actıvıtıes. *Pedagogy*, *1*(38). https://doi.org/https://doi.org/10.24195/2617-6688-2022-1-6

Rahmatika, Z. M. (2022). *The Influence of Fixed and Changing Distance Drilling Training Methods on the Archery Accuracy of Banyumas Archery School Archery Athletes in View of Hand Eye Coordination*. [Universitas Negeri Yogyakarta]. https://eprints.uny.ac.id/73102/1/fulltext_zelika miftahul rahmatika_20711251037.pdf

Rohiyatun, B., & Mulyani, S. E. (2017). The Relationship between Classroom Management Procedures and the Smoothness of the Teaching and Learning Process. *JUPE: Jurnal Pendidikan Mandala*, *2*(2), 92–99. https://ejournal.mandalanursa.org/index.php/JUPE/article/view/214

Roldan, R. H., Quiñonez, J. A., Arenas, J., Urrea, A. M., Barbosa-Granados, S., & Loaiza, H. H. A. (2021). Psychological Characteristics in Athletes with Physical Disability. *Retos*, *40*, 351–358. https://doi.org/10.47197/retos.v1i40.83079

Setyawan, H., Sumaryanto, S., Suyanto, S., Suharjana, S., García-Jiménez, J. V. G.-J., Pavlovic, R. P., Nowak, A. M. N., Susanto, N. S., Darmawan, A. D., Gusliana HB, G. H. B., Purnomo Shidiq, A. A. P. S., Hardianto, H., & Suwanto, F. R. S. (2024). The Importance of Archery Education Management in Physical Education Classes and Curriculum Programs for Students to Gain Skills in Many Areas. *Retos*, *53*, 242–249. https://doi.org/10.47197/retos.v53.101973

Setyawan, H., Suyanto, Suharjana, Prasetyo, Y., Wayoi, D. S., Hardianto, Susanto, N., Gani, I., & Rithaudin, A.

(2023). Archery Sport Class Management Using Demonstration Methods To Improve Results Learn Beginner Archery Skills. *Fizjoterapia Polska*, *23*(4), 208–218. https://doi.org/https://doi.org/10.56984/8ZG20A80C

Setyawan, H., Suyanto, Suharjana, Sumaryanto, Prasetyo, Y., Wayoi, D. S., Hardianto, Susanto, N., Gani, I., Komari, A., & Mardiyah, S. U. K. (2023). The Effect of Archery Class Management Implementation Using The 3-Step Focus Technique for Beginners. *Journal of Physical Education and Sport*, *23*(9), 2503–2512. https://doi.org/10.7752/jpes.2023.09288

Silvia, V. (2022). The Impact of Extracurricular Activities on The Personality Development of Primary School Students. *Instrumentul Bibliometric National*, *4*(72). https://doi.org/https://doi.org/10.52387/1811-5470.2021.4.10

Tiep, P. Q. (2023). The Role of Extracurricular Activities in Primary Education. *East African Scholars Journal of Education, Humanities and Literature*, *6*(5). https://doi.org/10.36349/easjehl.2023.v06i05.005

Ustun, F., & Tasgin, E. (2020). The Effect of Recreative Purpose Modern and Traditional Archery Education on Attention Parameters in Adolescents. *Journal of Education and Learning*, *9*(1). https://doi.org/10.5539/jel.v9n1p244

Wada, Y., & Takeda, N. (2020). Postural Stability Against Full-Field Dynamic Visual Disturbance In Archery Players. *Journal of Medical Investigation*, *67*(1.2). https://doi.org/10.2152/jmi.67.67

Wahid, A. H., Muali, C., & Mutmainnah, M. (2018). Class Management in Creating a Conducive Learning Atmosphere; Efforts to Improve Student Learning Achievement. *Al-Fikrah: Jurnal Manajemen Pendidikan*, *5*(2), 179–194. https://ojs.iainbatusangkar.ac.id/ojs/index.php/alfikrah/article/view/1106

Wati, A. R. Z., & Trihantoyo, S. (2020). Leading Classroom Management Strategies in Improving Student Learning Achievement. *JDMP (Jurnal Dinamika Manajemen Pendidikan)*, *5*(1), 46–57. https://journal.unesa.ac.id/index.php/jdmp/article/view/10605

Wibowo, M. S. R., Prasetyo, Y., Sriwahyuniati, C. F., Yulianto, W. D., & Prabowo, T. A. (2024). The Effect of Self-Efficacy, Social Support, and Achievement Motivation on Archery Athlete's Performance. *Retos*, *54*, 348–354. https://doi.org/10.47197/retos.v54.102211

Yachsie, B. T. P. W. B., Pranata, D., Prasetyo, Y., Suhasto, S., Famelia, P., & Hartanto, A. (2024). Drilling Distance Fixed VS Changing: Which Exercise Is Better for Accuracy Archery? *Retos*, *55*, 99–104. https://doi.org/10.47197/retos.v55.101417

Yangyang, Z., Xiaotong, Z., & Fazhi, L. (2023). Research on Influencing Factors of Young Students' Participation in Sports Activities Based on Social Ecology Theory. *Science Innovation*, *11*(3), 118–125. https://doi.org/10.11648/j.si.20231103.14

Datos de los/as autores/as y traductor/a:

Khairul Hamsyah	khairulhamsyah@uny.ac.id	Autor/a
Soni Nopembri	soni_nopembri@uny.ac.id	Autor/a
Amat Komari	amatkomari@uny.ac.id	Autor/a
Hendra Setyawan	hendra7777setyawan@uny.ac.id	Autor/a
Hedi Ardiyanto Hermawan	hedi_ardiyanto@uny.ac.id	Autor/a
Özgür Eken	ozgureken86@gmail.com	Autor/a
Sugiyanto	sugiyanto.fik@um.ac.id	Autor/a
Abdul Aziz Purnomo Shidiq	azizps@staff.uns.ac.id	Autor/a
Ratko Pavlovic	pavlovicratko@yahoo.com	Autor/a
Francesca Latino	francesca.latino@unipegaso.it	Autor/a
Francesco Tafuri	francesco.tafuri@unicusano.it	Autor/a
Nuridin Widya Pranoto	Nuridin@fik.unp.id	Autor/a
Muhammad Imam Rahmatullah	muhammadimamrahmatullah@lecturer.unri.ac.id	Autor/a
Mhsproofreading	mhsproofreading@gmail.com	Traductor/a