



EFFORTS TO IMPROVE BASKETBALL PLAYING SKILLS AND SOCIAL BEHAVIOR THROUGH THE BASE STATISTICS PROGRAM FOR POSITIVE YOUTH DEVELOPMENT (PYD)

(EXPERIMENTAL STUDY OF STUDENTS FOLLOWING BASKETBALL EXTRACURRICULAR IN SMP NEGERI 1 BALEENDAH)

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Abstract

The purpose of study to find out the improvement of basketball playing skills and the development of positive attitudes through the student statistics base program following the basketball extracurricular activities at SMP Negeri 1 Baleendah. The research method used is experimental research, with Pretest-Posttest Control Group Design. The population in this study was 41 student who used was 20 student who participated in extracurricular at SMP 1 Baleendah which was divided into 2 different groups. The instrument used is a statistical database formula take from FIBA.LIVESTATS and Teaching Personal Response and Social Responsibility (TPSR), then those were analyzed by independent sample t-test and Non-Parametric Whitney Man Tess. The study shows that there is a significant value $p(0,00) < 0,05$ which means, there is an increase in basketball playing skills, and a significant value p of $(1,000) > 0,05$ means there is a increase in student social behavior responsibility who joined basketball extracurricular activities at SMP Negeri 1 Baleendah. Based on the result, this study concluded that there is a significant increase in student basketball skills and social behavior responsibility through statistic base program adan TPSR for Positive youth Development.

Keyword:

Extracurricular, Basketball Playing skills, Positive Youth Development, Statistical base program

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Introduction

Youth sports are known as infrastructure facilities that can develop youth skills so that they can contribute positively to society. As explained by Bean. (2020); Preston. (2021) that exercise in adolescents has been identified as a viable suggestion to facilitate positive development associated with improving individuals both in terms of their physical, psychological, and social development in order to become individuals who are ready for the next life. Cope et al., (2017) say that sport is synonymous with perseverance in learning new skills and is required to work hard and work together to solve problems and make decisions. Therefore, there are many positive things that encourage youth involvement in sports.

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The sports extracurricular activities at the school are basketball extracurricular activities, this activity is a team activity, which is able to develop forms of cooperation and communication. So that it is thick with social nuances. This shows that basketball sports activities are not only good for developing physical aspects but also for developing positive student values. Socialization through sport is a complex process in which individuals learn skills, attitudes, values, and ways of behavior that enable functioning in a particular culture (Ioan-sabin, 2017,). Sports such as basketball have many potential benefits for children and adolescents, namely, healthy bodies, helping to avoid obesity, and accelerating growth. Participation in youth sports such as basketball offers many potential benefits for children and young people. Youth sports participation provides avenues for developing peer relationships, self-esteem, and leadership qualities (DiFiori et al., 2018).

The values derived from a social and ethical perspective are also very real. Basketball games can easily be modified according to the demands of the situation in social interaction. The number of players does not always have to be five people according to the official regulations, but it can be less or more than that number (for example there is now a new number in the basketball branch that has been completed in the Olympics, namely 3x3), to be able to embrace higher social engagement.

Positive Youth Development (PYD) developed a concept of a deficit approach that can reduce negative behavior problems in adolescents (Kendelle & Camiré, 2017). This plays a very important role in teaching teenagers to have positive attitudes and behaviors. Similar to the statement by Jacobs & Wright (2018) that Sport Based Youth Development (BSYD) through sports programs promotes quality youth or not only improves physical performance but also helps youth psychosocial development. Positive adolescent development framework or PYD is related Social Behavior Responsibility.

PYD program for young people or known as Positive Youth Development (PYD) is a view that understands adolescents are assets in human development who have the potential to be successful, develop healthily, and can develop positively (Lerner et al., 2016). Research on various youth-oriented development programs is based on the comprehensive findings from The National 4-H Council regarding the Positive Youth Development study which began in 2002, the results of the survey were 7,000 adolescents from various backgrounds in 42 states of the United States, which showed PYD contributed to decreased risk behavior in adolescence R. Lerner & J. Lerner (2016). Seeing the positive values that appear in the game of basketball and increasing the desire to compete for each individual, the role of marketing through print and electronic media will increase the rapid development of the game of basketball, both through competitions for age groups, amateurs and professionals.

This is because information media displaying match results and broadcasting matches directly or indirectly can provide information on the latest developments in basketball games. The results of basketball game matches can describe a person's skills based on statistical data. Statistical data such as shots, dribbles, and rebounds, as well as teamwork to attack or defend, are requirements for success in playing this sport (Lamas, Barrera, Otranto, & Ugrinowitsch, 2014), (Sampaio & Janeira, n.d., 2017) (Bazanov & Haljand, 2017).

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Based on observations in several championships or matches, there are several factors that can give victory in one match, one of which is the coach factor in rotating players which is one thing that cannot be taken lightly. Clay & Clay (2017). Based on this, it can be seen from the statistical data of each team through matches that can be seen the performance of the core players, as well as the reserve players, with the statistical data, can be used by the coach as a team evaluation material. There is no development of a basketball program model for students who take basketball extracurricular activities.

Methods

The experimental method in this study used the Pretest-Posttest Group Design to determine the initial ability of the sample.

Participant

The participants in this study were participants, the basis for selecting participants here is because SMPN 1 Baleendah has a very good youth character who takes basketball extracurricular activities.

Sample and Population

The population in this study were students who took basketball extracurricular activities at SMP Negeri 1 Baleendah aged 11-15 years with a sample of 41 with purposive sampling. Then the subject was given treatment. A part taken from the population is called the research sample. To determine the sample to be used in the study, the several sampling techniques can be used. Regarding the sampling technique, Darajat and Abduljabar (2014, 17) explain that: Based on the above statement, the authors in this study used a purposive technique in determining the sample. Regarding the saturated sampling technique, Sugiyono (2010, 124) explains that: "Purposive sampling is a sampling technique with certain considerations".

The instrument or instrument for measuring basketball playing skills is the statistical database formula in the basketball game taken from FIBA. LIVE STATS and Positive Youth Development, namely the responsible behavior of the Teaching Personality and Social Responsibility (TPSR) model (Hellison, 1995).

In this research, the subject is given treatment, and after the treatment period ends, a final test is carried out. After the initial test data and the final test data are collected, the data is compiled, processed, and statistically analyzed.

Procedure

As for the research steps. The first stage is giving a pretest. this stage a pretest is given, by making tournament games and recording statistical data for the results get initial data. The second stage, giving treatment (treatment) after the sample is given a pretest, then the sample is given treatment. Research here at the same time acts as an extracurricular trainer. The third stage, giving a posttest. This stage is the last stage in this research, namely by giving a final test (posttest) to the sample who has been given treatment.

The research design is a detailed description of the entire research, starting from the formulation of the problem, objectives, description of the relationship between variables, formulation of hypotheses to the design of data analysis, which is poured in writing in the form of a research review. Determining the method in research is a very important step because it can determine the success or failure of



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a study. Research methods are absolutely necessary so that researchers can proceed systematically in accordance with the rules. The research used in this research is the Pretest-Posttest Control Group Design.

Data Analysis

Demographics of research subjects are: calculating body mass index, age, and others. Description of the data, Calculating the mean (mean) and standard deviation of the entire group, Converting the raw data into a standard score (t-score). Testing the analysis prerequisites using spss v.26 in the form of, homogeneity test using Levene's at p-value 0.05, normality test using Shapiro-Wilk at p-value 0.05, Testing hypothesis analysis using paired-sample t-test and Non-test Parametric

Result

The data obtained from the test results are raw data, to get the meaning of the conclusions from the data, calculations and statistical analysis are carried out, based on the research steps in the previous chapter. The author uses the SPSS (Statistical package for social science) version 26 application in processing and analyzing the data that has been obtained. As for the results of data processing and analysis. The author describes as follows

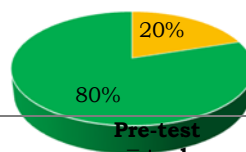
Table 1. Research Subject Demographics

No	Data	Mean	Standard Deviation	Min	Max	N
1	Age	12,6	0,89	11	14	20
2	Height	168,35	5,89	160,00	180,00	
3	Weight	56,40	9,06	45,00	79,00	
4	Body Massa Index	19,80	22,04	17,15	24,38	

Based on the survey summary of demographic data, the obesity line in boys aged 11-14 years have BMI above 30, the overweight line in boys aged 11-14 years has a BMI of 25, and the normal line in boys aged 11-14 years have a BMI of 21, a thin line according to WHO in a boy aged 14 years has a BMI of 17, and a very thin line

according to WHO in boys aged 14 years has a BMI of 16. In the picture below it can be seen that 80% have a normal BMI and 20% have a lean BMI.

KATEGORI BMI



Group Data		Pre-test $\bar{x} \pm sd$	Post-test $\bar{x} \pm sd$	Min	Max	N
Basketball Playing Skills	Control	5,90±1,52	6,70±1,42	0	8	20
	Experiment	1,50±1,34	4,80±2,25			
Responsibility	Control	2,40±0,84	9,80±0,63	2	10	20
	Experiment	2,20±0,63	9,60±0,84			

Fig 1. Graphic Body Massa Index

Table 2. Recapitulation of Initial Data Calculation Results

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Based on the summary of the calculation results of the average and standard deviation in the table above. It can be seen that the average results of the measurement of basketball playing skills and social behavior responsibility through the statistical base program, the control group pre-test was 5.90 with a standard deviation of 1.52 for the measurement of basketball playing skills and social behavior responsibility of 2.40 with standard deviation is 0.84, while the post-test average is 6.70 with a standard deviation of 1.42 and 9.80 with a standard deviation of 0.63. in the experimental group, the average pre-test was 1.50 with a standard deviation of 1.34 and 2.20 with a standard deviation of 0.63, while the post-test average was 4.80 with a standard deviation of 2.25.

Table 3. Normality test

Group Data		Shapiro-Wilk		Description
		statistic	p-value	
Basketball Playing Skills	Control	0,885	0,149	Normal
	Experiment	0,916	0,328	
Responsibility	control	0,594	0,000	Abnormal
	Experiment	0,594	0,000	

From the table data above, the results of the normality test of the data obtained through Shapiro Wilk's analysis, show that from the test variable, namely the basketball playing skills data of the control group with a value of $p(0.149) > 0.05$ and the experimental group $p(0.328) > 0.05$ which means that the data are normally distributed, while the program database program for social behavior responsibility statistics control group with a value of $p(0.000) < 0.05$ and the experimental group $p(0.000) < 0.05$, then the data is declared not normally distributed.

Table 4. There is an Improvement in Basketball Playing Skills on the Implementation of the Base Statistics Program (Summary of Independent Sample t-test results at p-value 0.05)

Group Data	N	t-count	Sig.	Decision	Description
Basketball Playing Skills	20	-8,763	0,000*	H_0 reject	Sig.

From the data table above, the table has a t-count value = -8.763 and a p-value of $0.000 < 0.05$ then H_0 is rejected and has increased, it can be said that basketball playing skills affect the implementation of the program basis.

Table 5. There is an increase in socially responsible behavior towards the implementation of TPSR (Summary of the results of the non-parametric Man Whitney Test at p-value 0.05))

Group Data	N	Mann-Whitney	Wilcoxon	Asymp.Sig.	Keputusan	Description
Responsibility	20	50,000	105,000	1,000	H_0 Rejected	Sig.

From the table data above, the table has a Mann-Whiney value = 50,000, Wilcoxon = 105.00 and a p-value of $1,000 > 0.05$, so H_0 is rejected and has increased, it can be concluded that socially responsible behavior affects the implementation of TPSR.



Discussion

The results of basketball playing skills on the application of the statistical base program

The results of data processing and analysis stated that there was an increase in basketball playing skills through a statistical database program, this was supported by several similar studies that had been done before. Based on research conducted by (Sampaio et al., 2010) entitled Effects of season period, team quality, and playing time on basketball players' game-related statistics, the results of this study will help coaches and players to better understand how the game is performing. according to the quality of the team and playing time. For example, the weaker team should improve especially in defensive rebounds, while the intermediate team should improve in field goals and passing. In addition, less important players can benefit from focusing on making fewer mistakes. of these results.

The results of social behavior responsibility on the implementation of the TPSR

The results of data processing and analysis stated that there was an increase in social behavior responsibility through a model TPSR this was supported by several similar studies that had been done before. Based on the research conducted by (Hancock et al., 2012) entitled Adolescent Involvement in Extracurricular Activities: Influences on Leadership Skills. This study found results in the form of the fact that men and women use adults as their reference in developing positive attitudes and abilities to be better and they have more perceptions and knowledge about skills, and leadership, these findings also show adolescents' perceptions of their leadership skills. influenced by the role of involvement in extracurricular activities. From the results of this study, it can be concluded that from both experimental and control groups, both from basketball playing skills and social behavior responsibility that the involvement of youth in statistical database program activities applied in extracurricular activities can affect students who take basketball extracurricular activities towards basketball skills. and their attitude of responsibility. Therefore, the application of the base statistics program can improve basketball playing skills and social behavior responsibility. So, from the explanation above, it can be concluded that the base statistics program developed from the youth program (Grant et al., 2016) influences the development of basketball playing skills and social behavior responsibility of students who take basketball extracurricular activities so that they can support good achievement and responsibility.

Conclusion

The statistical base program in which there is a youth basketball program is proven to be able to improve basketball playing skills, and social responsibility can help support basketball playing skills and foster positive behavior in students or athletes. There is an increase in basketball playing skills and social behavior responsibility towards the implementation of the statistical base program in the context of positive youth development

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