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<https://ejournal.upi.edu/index.php/penjas/article/view/60138>DOI: <https://doi.org/10.17509/jpjo.v8i2.60138>**Application of Role-Playing Model in Physical Education to Develop Student Social Skills****Budiman^{1*}, Adang Suherman¹, Beltasar Tarigan¹, Tite Juliantine¹, Erick Burhaein²**¹Department of Sports Education, Postgraduate Program, Universitas Pendidikan Indonesia, Indonesia²Department of Sports Education, Universitas Ma'arif Nahdlatul Ulama Kebumen, Indonesia**Article Info***Article History :**Received July 2023**Revised August 2023**Accepted August 2023**Available online September 2023**Keywords :**Physical Education, Role-Playing, Social Skill, Students***Abstract**

Social skill is one of the life skills that must be possessed by students. Students who have good social skills can interact with their peers and show a positive attitude in school and social settings. Role-playing learning model is considered as a model that can develop student social skills. However, there is no empirical evidence that role-playing learning model in Physical Education can develop student social skills. Therefore, this study was aimed to examine the effect of role-playing model in Physical Education on student social skills. This study used an experimental method with One Group Pre-Test Post-Test Design. This study involved 30 sixth grade students of public elementary schools in Bayongbong District, Garut Regency. The instrument used was a social skill questionnaire compiled by researchers. The test used to test the hypothesis of this study was the paired sample t-test using SPSS version 25 with a significance level of $\alpha=0.05$. The results of this study showed that there was an effect of role-playing model on student social skills. This study concludes that the use of role-playing model in Physical Education has a positive impact on student social skills. This model is able to play a strategic role as an educational tool, especially for teaching social skills.

INTRODUCTION

Social skill is one of important life skills that children must have (Huber et al., 2019; Sørli et al., 2021). Social skills are skills that a person needs to interact and communicate verbally and non-verbally with others (Scullin, 2020). This skill involves various skills, such as communication, participation, emotional, and interaction skills. Students with good social skills have a positive relationship with others, positive emotional growth, and opportunities to achieve academic skills (Caprara et al., 2014; Gustavsen, 2017; Özbey & Köyceğiz, 2019; Vitiello & Williford, 2016). Students who have good social skills tend to be preferred by their friends and teachers because they have good attitudes, such as listening to instructions and directions from teachers, being able to interact with friends, and showing positive attitudes both in school environment and social environment (Arnesen et al., 2018).

Lack of social skills has been linked to problems in various domains of life. Several studies have linked a lack of social skills with delinquency (Gustavsen, 2017). A study showed that students with low social skills were at a risk of substance abuse (Vorobjov et al., 2014). Another study found that students with lower social skills were at a greater risk of starting to smoke and smoking daily (50% increased risk) and had a higher risk of lifetime cannabis, inhalant, and non-prescription sedative use. Then, studies also showed that lower social skills had an impact on the lack of interaction or participation with others (Gülay & Akman, 2009), difficulty in learning, antisocial behavior, involvement in violent and criminal behaviors (Colman et al., 2009), and academic failure that might lead to unemployment (Masten et al., 2010).

One of the ways to develop student social skills is through Physical Education (PE) at schools. Physical Education is a subset of a well-rounded education using physical activity as a student learning activity to improve physical abilities and functional values, including cognitive, affective, and social values. Physical Education through physical activity and sports contribute greatly to the social development of children (Bailey et al., 2009; Eldar & Ayvazo, 2009; Hellison & Martinek, 2006). In Physical Education learning process, students often interact and communicate with other students, thus Physical Education becomes a suitable subject for teaching social skills (Grammatikopoulos et al., 2012).

Developing social skills through Physical Education subject can run optimally if the activities are planned or structured and presented appropriately (Bailey, 2006). The results of studies showed that a quality Physical Education had a positive influence on fair play behavior (Vidoni & Ward, 2009), cooperation, social skills (Lisahunter, 2006), and social and moral development (Hellison & Martinek, 2006).

Several studies had examined the influence of role-playing model in education. A study examined the effect of digital role-playing learning on critical thinking skills, showing that students achieved significant progress both in overall critical thinking performance and in learning motivation (Chen et al., 2021). Studies also found that role-playing instruction in a virtual learning environment had positive impacts on learning engagement (Vasileiou & Paraskeva, 2010), improved social relationships (Abbott et al., 2022), and reduced bullying at schools (Bagès et al., 2021).

Based on the previous research results, role-playing had been studied in the learning process and in various trainings. The results showed that it had positive effects on critical thinking, increased mobility, decreased sense of social anxiety, and decreased bullying behavior at schools. However, the empirical evidence of the application of role-playing model in Physical Education learning on social skills has not been known yet. The new literature review of role-playing in Physical Education to improve the affective domain (Samalot-Rivera, 2014) is hypothetical and needs to be verified. Therefore, studies are needed to strengthen empirical evidence related to the effect of role-playing learning model in Physical Education on student social skills.

METHODS

The research approach used in this study was an experimental technique with one group pre-test post-test design. The study was to examine the effect of the role-playing model (independent variable) on student social skills (dependent variable). Social skill tests were conducted before and at the end of the program.

Participants

The main participants or subjects of this study were 30 Grade VI students (male and female aged 11-12 years). All parents and guardians gave a prior writ-

ten consent to the children participating in the program. The permission was also obtained from each school principal.

Sampling Procedures

A total of 30 participants from four public elementary schools in Bayongbong District, Garut Regency, were involved. Students were chosen using simple random sampling from 130 people. Randomization was administered by numbering each student in the population, writing each number in a small paper, rolling the paper, and then placing it into a box. The box was then shaken. The rolls of paper were issued according to the specified number. The numbers that came out represented selected samples of the study.

Materials and Apparatus

In this study, the authors used a social skill questionnaire instrument compiled by researchers based on the structure formulated by (Jurevičienė et al., 2012). The questionnaire instrument contained 5 social skills, including emotional, social cognition, participation, communication, and interaction skills. The grid of social skill instruments is presented in Table 1.

Table 1. The Grid of Social Skill Instrument

Sub Variables of Social Skills	Indicators
1. Emotional Skills	1. Emotional sensitivity ability
	2. Ability to express emotions
	3. Self-awareness ability
	4. Self-control ability
2. Social Cognition Skills	1. Ability to be sensitive to the social environment
	2. Ability to make decisions
3. Communication Skills	1. Ability to adjust the volume of the voice
	2. Ability to control emotions
	3. Ability to say positive words
	4. Ability to listen
4. Interaction Skills	1. Ability to manage and control interactions
5. Participation Skills	1. Ability to participate in group activities

This questionnaire gained a reliability of 0.713. Based on the guideline table of the correlation coefficient interpretation (Sugiyono, 2009, p. 257), the value of 0.713 is included in the high category. Therefore, the developed social skill questionnaire was indicated to have a high reliability.

Procedures

The research procedure contains the steps and flow of a research. The steps and flow of the research conducted in this study consisted of three main stages. The first stage is the initial test stage. The initial test was conducted to examine the social skills of the samples. To obtain data of the student social skills, social skill questionnaire was distributed.

The second stage was the treatment stage. In this study, students were given a role-playing model intervention in Physical Education in 13 meetings, referring to the results of the study of (Goudas & Magotsiou, 2009). The study found the effect of cooperative Physical Education programs on student social skills. The amount of learning time per meeting was 2x35 minutes (70 minutes). The learning process consisted of five phases, including Defining and Explaining the Target Skills phase, Modelling the Skills for Learners phase, Role Play phase, Assessing phase, and Following Up phase (Samalot-Rivera, 2014). The scenarios for the role-playing learning model are presented in Table 2.

The third stage was the final test stage. The final test was performed after the treatment program had been completed. In the post-test activity, students carried out social skill tests. This final test aimed to see and find out the improvement of the students after receiving the treatment in the form of Physical Education learning using Role-Playing Rivera (RPR).

Design or Data Analysis

The data obtained were tested statistically. The test steps involved 1) prerequisite test (normality test using the Kolmogorov Smirnov test, homogeneity test using Leven statistical test), and 2) hypothesis test using t-test carried out with the help of SPSS 25.

Table 2. Role-Playing Learning Scenarios

Learning Activities	Event Descriptions	Duration
A. Introduction		
Praying	Praying	15 minutes
Awareness provision	Teachers reminding students the responsibility and respect of the tasks of each role	
Delivery of learning objectives	Explaining the rules, procedures, and achievements in volleyball learning	
Warming-up	Static and dynamic stretching	
B. Core Activities		
1. Defining target performance	Providing support/motivation when friends experiencing a defeat	50 minutes
2. Modeling	Teachers teaching ways to motivate defeated friends by seeing who to be motivated, speaking empathetically, giving a hug	
3. Role-playing	Examples Appropriate Tomi: Looking down and grieving about losing. Jerry: It's okay Tom, don't give up! There's still a chance for the next game. Tom: Thanks Jerr. Inappropriate Tomi: looking down and grieving about losing. Jerry: showing indifference to Tomi.	
4. Evaluation: asking for the answer	Teacher asking how to provide supports to a friend when losing Teacher asking why it is important to cheer up teammates when losing Teacher asking students to set an example of giving support to friends outside of Physical Education learning	
5. Follow Up	Teacher asking students to show supportive/motivating behavior to everyone at school, at home, and in the community	
C. Final Activities		
Cooling down	Static stretching	5 minutes
Praying	Praying	
Total Time		70 minutes

RESULT

Description of the initial social skill test

Table 3 shows description of student initial social skill test data. From 30 students, the lowest score was 60, the highest score was 86, the mean score was 72.20, the median was 73.00, the mode was 67, and the standard deviation was 6,814. The complete data can be seen at Table 3.

Table 3. Description of Social Skill Initial Test Data

Variable	Mean	SD	Minimum	Maximum
Pre-test	72.2000	6.81479	60.00	86.00

Similar results were also obtained using the histogram. Figure 1 is the histogram of student initial social

skill test results.

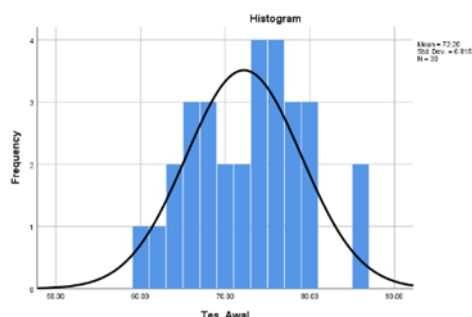


Figure 1. Results of the Initial Social Skill Test

From the histogram in Figure 1, the mean was 72.20 and the standard deviation was 6.815.

Description of final social skill test data

Table 4 shows description of final social skill test data. From 30 students receiving the role-playing learning model treatment, the lowest score was 66, the highest score was 89, the mean score was 75.60, the median was 75.00, the mode was 70, and the standard deviation was 5,223. The complete data can be seen in Table 4.

Table 4. Description of Final Social Skill Test Data

Variable	Mean	SD	Min.	Max.
Post-test	75.6000	5.22329	66.00	89.00

Similar results were also obtained using the histogram. Figure 2 is a histogram of social skill outcomes of students taught using the role-playing learning model.

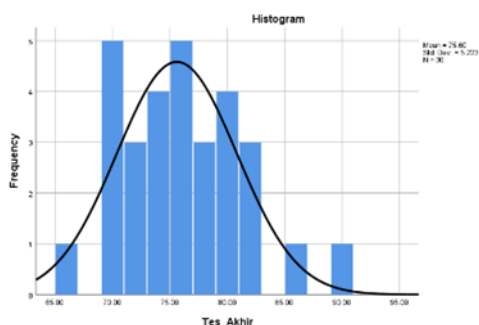


Figure 2. Final Social Skill Test Data

From the histogram in Figure 2, from 30 students taught using the RPR learning model, the mean score was 75.60 and the standard deviation was 5,223.

The first data analysis testing requirement was the normality test. The normality test used the Kolmogorov Smirnov employing IBM SPSS 25. The test states that if the significance value is less than 0.05 (Sig. < 0.05), the data are not normally distributed. If the significance value is more than 0.05 (Sig. > 0.05), then the data are normally distributed. The result of the normality test on social skills of students receiving the role-playing model shows that the data of the social skills in the pretest Significance (Sig.) = 0.200 > 0.05, thus the distribution of data was declared normal. The post-test data gained Significance value (Sig.) = 0.200 > 0.05, thus the distribution of data was declared normal.

The second statistical testing requirement was the homogeneity test. The test to administer homogeneity

test was the one way Anova statistical test using IBM SPSS 25. The test states that if (Sig.) > 0.05 then the data are homogeneous; if (Sig.) < 0.05 then the data are not homogeneous. The result of the homogeneity test gained Levene statistic value = 2.902 and significance value (Sig.) = 0.094 > 0.05, indicating that the distribution of data was homogeneous.

The statistic used to test the hypothesis was the paired-sample test using IBM SPSS 25. The hypothesis included H0 (there was no sizable effect of the role-play model in Physical Education on the social skills of students) and H1 (there was a good sized impact of the role-playing model in Physical Education on the social skills of students). The decision criterion states that if the significance value > 0.05, H0 is accepted and H1 is rejected; if the significance value < 0.05, H0 is rejected and H1 is accepted. The result of paired sample test can be seen in Table 5.

Table 5. Paired Sample Test Results

	t	df	Sig. (2-tailed)
Pair 1 Pretest - Posttest	-3.611	29	.001

Based on the data output, a Sig. (2-tailed) value of 0.001 < 0.05 was obtained. According to the basis for decision making of the Paired Sample Test, H0 was rejected and H1 was accepted, meaning that there was a significant effect of role-playing in Physical Education on student social skills.

DISCUSSION

Hypothesis testing showed that there was a significant effect of role-playing (RP) learning model in Physical Education on student social skills. Although there has not been empirical evidence related to the influence of role-playing model in Physical Education on student social skills until now, this study, however, is in line with the opinion of (Samalot-Rivera, 2014) that role-playing model is a teaching strategy that emphasizes the social nature of learning. It is also seen as a behavioral exercise to practice the skills needed in social interaction (Joyce et al., 1986). Role-playing model helps students learn their social values and reflect their behavior. This model also helps students understand and empathize with value differences when interacting. This

model can be a strategy for solving conflict in a way that respects different points of view.

The development of student social skills through role-playing model in Physical Education is based on learning phases designed to develop these skills. Five phases are suggested for implementing role-playing strategies in Physical Education (Samalot-Rivera, 2014). The first phase is the teacher determining the social skills to be taught. It will make it easier for students to get information and students will be more focused on one of the social skills. According to (Kendellen et al., 2017), to optimally teaching life skills, we should focus on one skill per lesson. In the second phase, students acquire knowledge of social skills through lectures and demonstrations given by the teacher.

According to Killen (Juliantine et al., 2013, p. 41), direct instruction refers to various expository learning, including the transfer of knowledge from teachers to students directly such as through lectures, demonstrations, and questions and answers involving the entire class. Similarly, in this model, social skills are introduced through teacher lectures and demonstrations. From the delivery of social skill material, students use their listener senses to receive information given verbally by the teacher and use their sense of sight to see examples of social skills demonstrated by the teacher. Then, the information received by these students enters the temporary storage memory. In the third phase, the role-playing stage, students act out scenes that have been instructed or designed by the teacher. Students play out how to behave appropriately during games and sports, such as respecting coaches, referees, opponents and friends, giving encouragement, providing assistance to others (Vidoni & Ulman, 2012), accepting defeat, and congratulating the winner (River, 2014). It means that students at this stage not only get information in theories or concepts, but they also practice it. It will certainly strengthen student social skills. The provision of theories or concepts followed by applicable practice will make it easier for students to understand and make the knowledge gained more meaningful.

In the fourth phase, the teacher asks questions to gauge student understanding of the target skill. In this phase, teachers can assess understanding, while students can recall what they have learned. Therefore, it

will strengthen student social skills because the information received by students enters the temporary storage memory. Information on this temporary storage can then be lost and forgotten if not habituated or repeated. Otherwise, it will become permanent if it is repeated. In the fifth stage, the teacher asks students to use the behaviors learned in Physical Education classes with their peers at school, home, and community. As explained by (Gould & Carson, 2008), for a life skill learned in sport to truly be considered a life skill, it must be transferred and applied outside of sport. It makes students not only have positive interaction and communication skills in Physical Education learning, but also at school, at home, and in society.

Another finding of the study was an improvement of student social skills after receiving role-playing model for 13 meetings. It is in accordance with the results of the study of (Goudas & Magotsiou, 2009) that showed improved student social skills after receiving a cooperative Physical Education program for 13 meetings. One of the activities that strengthens the improvement of social skills is the repeating social skill activity. Edward I Thorndike law (Hergenhahn & Olson, 2008, p. 65) states that the connection between stimulus and response will be strong with a frequent use. This law states that the connection between stimulus and response is strong if it is used frequently. Then, the principle of memory according to (Slameto, 2010, pp. 111–113) states that learning is influenced by the frequency of encountering the same or similar stimuli and responses made. Students will improve their social skills if they have more opportunities to repeat them. So, this study used repetition for 13 meetings and found an increase in student social skills.

CONCLUSION

Based on the result and discussion, the study concludes that there is an influence of role-playing model in Physical Education on student social skills. The role-playing learning model is an appropriate strategy for developing student social skills. To help students understand and apply the social skill components, the social skills taught in Physical Education can be transferred to everyday life outside Physical Education and Sports classes.

Role-playing model should be taken into account in designing Physical Education curriculum activ-

ities at the elementary school level to achieve the Physical Education goals, such as social development. The model is able to play a strategic role as an educational tool, especially to teach social skills, and as an important effort to overcome the violent and criminal behaviors, learning difficulties, substance abuse, and anti-social behaviors.

This study has limitations, namely the lack of retention measures from the influence of role-playing models and subsequent research to examine student acquired social skills. The possibility of emotional intelligence was not considered in this study. Emotional intelligence might be a confounding variable, thus it should be considered in future studies. Moreover, this study examined the influence of role-playing model on social skills using the One Group Pre-Test Post-Test Design. In future studies, robust experimental designs, such as the Randomized Pre-Test Post-Test Control Group Design, to assess the effect of the model on social skills .

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