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Leadership and Handball Game Performance through Sport Education Model

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Abstract

The implementation of sports activities and learning is carried out to improve performance. The meaning of the values of sports, as the most important thing of positive sports development, has not been sufficiently revealed. The purpose of this study was to determine the differences in the development and mastery of the students through the implementation of sport education models containing leadership content and without leadership content. This study used a quasi-experimental control group pre-post test design involving 80 students as the samples through the purposive sampling technique. The samples were divided into two groups of students taking handball game courses. The results showed that there were two influential things, namely intentionally simulated student learning and general students learning without simulation. Thus, a finding of interest in the study was that after implementation of sport education models containing leadership content, performance enhancement in a 27% difference in the application of the simulated education model. Meanwhile, there was no difference in handball games performance, which means that both of them were affected. Furthermore, the development of leadership had a greater influence than the increase in handball games performance with a 22% difference. It might be because the students gained valuable values from the handball learning experience through the sports education model that is useful for learners and coaches and can be applied in sports clubs and, most importantly, in educational institutions.

INTRODUCTION

The construction of life skill learning in the context of positive youth development (PYD) is often defined as an internal personal asset for goal setting, emotional control, self-esteem, ethics, and hard work through the facilitation of sports activities, which the goals can be transferred to everyday life outside sports activities (Gould and Carson 2008). Learning life skills can be conducted implicitly in a structured and intentional programmed sports activity, which the results could be much better compared to a structured but unintentional sports program (Bean and Forneris 2016). Therefore, a sports program designed in a structured and intentional manner for teaching life skills, which includes a decision-making component in leadership, could provide more effective opportunities to encourage PYD.

The role of game sports, according to experts, has the potential to be used as a medium for developing youth leadership. Regarding its characteristics, game sports will provide real opportunities to develop life skills, including interaction on how to develop leadership, such as the experience of a captain in a team. Particularly, it has been implemented by the Institute for Study of Youth Sport, which has partnered with the Michigan High School Athletics Association, by creating a Captain Leadership Training Program in a sports team (Gould & Voelker, 2010). Sports activities for the leadership potential development become the main target, where every child in the sports activity has an experience as a captain in a team. The practice of developing leadership potential in Indonesia, through sports, has not been widely developed. The practice of appointing team captains is often administered for the needs of the team. The captain is mostly the people with the best abilities in their team. Likewise, in the context of learning at schools, the application of leadership values through the utilization of sports, as a social intervention to promote PYD for students, is still low. Therefore, the idea of sports programs and practices for young people aimed at developing leadership or Youth Sport Leadership (YSL) emerges; although the sports program design has not been proven to be effective in facilitating PYD as expected, it is conceptually acceptable that sports can develop intrapersonal life skills as the result of learning transfer (Newman, Kim, Alvarez, & Tucker, 2018).

The results of previous research on golf sport show that it could develop intrapersonal skills, including honesty, teamwork, and respect (Kendellen et al. 2017). Regarding the goal of sports to develop life skills, including leadership, a planned and intentional program must be designed at an educational institution, which is relevant to the research conducted by the National College for School Leadership (NCSL) in England that used a mixed learning model to meet leadership development needs in its national program. The aim is to consider the implications and impacts of performance-based learning programs to realize leadership development commitments (Simkins, 2009). Other research also reveals that the implementation of Physical Education can be designed as a socialization media for young people to provide fun interactive opportunities in order to motivate and provide opportunities to learn leadership skills (Gould and Voelker 2012).

Recently, there has been an increase in interest in sports activities carried out after school to address negative adolescent behaviors, such as crime and drug abuse. The practice of organizing the sports is aimed at positive youth development, which involves coaches and parents of the children (Fraser-thomas et al. 2007). Physical Education and Sports Schools (PESS) make a positive contribution to the cognitive, affective, and psychomotor aspects of adolescents by paying attention to the implementation of the program so that the program and its objectives could run well (Bailey, et al, 2009).

Sport learning programs can develop positive leadership potential and could be carried out in various situations, including in community environments and schools through sports activities, both individually and in groups. However, it requires a better understanding of the process to be a leader. Therefore, there will be a need for structured and intentional learning to increase the effectiveness of the results of the exercise or learning (Hastie, 1998; HasBean & Forneris, 2016). The results showed that leadership involvement simulated in sports activities among student-athletes resulted in a meaningful and more complete educational experience (Blanton, Sturges, and Gould 2014). Therefore, the design of sports activities does not only develop physical skills and abilities but also develop life skills (Gould and Voelker 2010).

A model-based approach in Physical Education

learning can be a solution for overcoming the limitations of traditional learning, providing holistic learning outcomes for students (Kirk, et al, 2013), and having the potential to promote a positive cultural dimension of sport (Wallhead and O'sullivan 2005). The values of learning through the sports education model have not sufficiently provided a real depiction at this time. Despite having easy access to various games, very few games are designed with the aim of developing leadership, and in general, they are only focused on describing the concept and practice of the playing skill mastery in sports (Buzady, 2017). The involvement of students in-game learning is not only for developing game skills and capabilities, but also for developing their management and leadership skills which can be directly developed (Scholz, Yarime, and Shiroyama 2018).

The role of leadership in sports activities does not only develop the psychomotor aspects, but it must also develop other dimensional aspects, such as the experienced values gained from sports activities to develop life skills related to sports development and peace (SDP). Leadership practices should be developed and programmed in institutions, education, clubs, sport schools, and colleges with the right model. The implementation of the sports education model that has been formally implemented for a long time in physical education and sports learning has a strategic role in targeting young people. It is important to learn leadership and gain experience from sports game learning from a young age. The purpose of this study was to develop leadership and handball game performance through handball learning using a sports education model.

METHODS

The purpose of this study was to measure the leadership development and the level of the game performance mastery of a group of students who were intentionally given leadership content programs and a group of students who were not given a leadership content program. The method used in this research was an experimental method aimed to investigate the possibility of a cause-and-effect relationship and to try out a treatment on an experimental group using a quasi-experimental control group pre-post test design. The treatment given was the leadership content tested on two experimental groups.

Participants

This study used a quasi-experimental control group pre-post test design. The subjects of this study were 80 Sport Education students at a state university in Bandung. The subjects were divided into 2 groups, each of which was determined by purposive sampling. Forty students received handball learning with sport education models containing leadership content as an experimental group and 40 students received handball game learning through sport education models without leadership content as the control group. The inclusion criteria for research subjects were (1) had not taken the handball course and had not been specially trained in handball training, (2) first-year students, and (3) were willing to be involved in research by signing informed consent. While the research exclusion criteria were (1) did not take handball courses and were trained in handball games and (2) were not willing to take part in the research.

Instrument

This experiment was carried out in a standard handball game field. To measure leadership development, the Identity Leadership Inventory (ILI) Assessment sheet was used (Steffens et al., 2014). The instrument had been translated and validated by the Language Institute of Universitas Pendidikan Indonesia. Meanwhile, Games Performance Assessment Instrument (GPAI) was used to measure the game performance (Metzler, 2011).

Procedure

Participants, who had been divided into the two sample groups, did preliminary tests by filling in the identity leadership inventory assessment sheet and doing a game performance test using the games Performance Assessment Instrument (GPAI) (Metzler, 2011). Participants firstly filled out the identity leadership inventory assessment sheet test guided by the research team so that participants could fill in the questionnaire correctly. After filling out the questionnaire, the game performance test was conducted. Participants were asked to play a simple handball game in the form of small side games. Before carrying out the game, the participants did a standard warming-up according to the protocol for approximately 10 minutes. All participants played a simple eight-minute handball game which was divided into two rounds. During the game, to evaluate

game performance, the game was recorded using video. The research was then continued in the following weeks by providing treatments for handball game learning with sport education models containing leadership content and handball game learning with sport education models without leadership content. The treatment was carried out for 8 meetings. After 8 meetings, the participants took final tests, including the leadership development test using identity leadership inventory assessment and game performance tests using the GPAI.

Data Analysis

This study used an experimental design (quasi-experimental) to find out the effect in the group receiving treatments and the group that did not receive treatments on other variables. Analysis of the data used the normality test, homogeneity test, and the Multivariate Test (MANOVA) using SPSS. 20.

RESULT

The findings of this study compared the implementation of the sport education model (SEM) which was divided into two groups, namely a group containing leadership content and a group without leadership content. The groups included a group implementing leadership and game performance development with intentionally structured leadership content and a group without a leadership content. The data processing steps in the study consisted of reporting the results of the prerequisite test using the Kolmogorov Smirnov for Normality Test and the results of the multivariate test (Manova) with SPSS 20. The prerequisite analysis test showed the data of leadership development variable and game performance variable (p value of leadership development $0.954 > 0.05$; p value of games performance $0.568 > 0.05$).

According to the results of the multivariate hypothesis test in Table 1, the p-value is $0.000 < 0.05$. The p-value is smaller than the sig value of 0.05. This means that there was a difference in the leadership development improvement between the group with leadership content and the group without leadership content. The difference of the increase of leadership development between the two treatment groups was 26.8%. Whereas, the game performance mastery results from the multivariate test gained a p-value $0.727 \geq 0.05$. The p-value criterion is not smaller than the sig value 0.05.

The conclusion is that there was no significant difference between game performance with leadership content and game performance without leadership content. Table 1 and Table 2 show that, in the leadership and game performance developments of the SEM model group with leadership content and with no leadership content, there was a significant difference. The value of the multivariate test shows that the leadership development p-value: $0.000 < 0.05$, with 92, 2% contribution, and the game performance score p-value: $0.000 < 0.05$, with 70.7% contribution. It concludes that the increase of the leadership development was better than the increase of the game performance.

Table 1. Test of Subject Effect and Grand Mean

Independent Variable	Dependent Variable	P Value	Partial Eta Squared
Corrected Model	Leadership Development	0,000	0,268
	Games Performance	0,727	0,002
Intercept	Leadership Development	0,000	0,922
	Games Performance	0,000	0,707
Group	Leadership Development	0,000	0,268
	Games Performance	0,727	0,002

Table 2. Grand Mean Results

Dependent Variable	Grand Mean	SE	95% CI
Leadership Development	28,583	0,000	26,8 %
Games Performance	0,122	0.727	00,2 %

Table 3. Results of The Independent Variable Mean Differences

Dependent Variable	Independent Variable	Mean	SE	95% CI
Leadership Development	Receiving Leadership Content	19,57	5,15	26,8 %
	Without Leadership Content	13,73	4,61	
Games Performance	Receiving Leadership Content	12,05	7,18	00,2 %
	Without Leadership Content	11,45	8,12	

Table 3 shows that the SEM model with leadership content and without leadership content has a difference with 26.8% effect, while the value of games performance has 00.2% effect. Therefore, it indicates that there were differences of the influence of the mean gain of the leadership development and games performance development, whether the subjects received a leadership content or not.

DISCUSSION

The implementation of SEM with leadership content, in its development, is better than SEM without leadership content. Therefore, strengthening the leadership program applied in the sports game learning model should be a concern to be developed by the stakeholders in schools and other institutions. Leadership learning is important because leadership is an activity to influence the behavior of others, or the art of influencing the behavior of others, or the art of influencing humans both individually and in groups. During the learning process, where they got a role as a leader, it was proven that, through simulated leadership learning, each individual would get a leadership experience. Concerning the development of the sport aimed to develop positive youths as a goal, there is a research result of coaching on the Wave (CotW) as an updated model, YSL will be more prepared to develop intentional training practices to facilitate sports into PYD (Newman et al. 2018).

Athlete leadership programs could develop their qualities, such as responsibility, role modeling, motivation, communication, persistence, and team unity that will help athlete leaders carry out roles and responsibilities through athlete leadership training that will facilitate an effective transfer of learning (Koh et al. 2020). Leadership development can increase if each individual frequently interacts with their fellow teams. Other study findings show a significant increase in athlete tasks in each season. There is an increasing number of tasks and a dynamic trait of athlete social leadership in teams (Duguay et al. 2019). With planning, the program structure, in its application, will produce qualified candidates for leaders. It will also contribute to a systematic picture of collective leadership development, not only individual leadership development. (Kjellström, Törnblom, and Stålné 2020). A structured method of leadership content will have an impact on policy and development interests in organizations and institutions. The

leadership development applied in the model should be measured, planned, and intentionally conducted by students. The implementation of structured and intentional SEM through strengthening programs is relevant to the results of research on leadership development in sports to improve a high skill, strong work ethic, cognitive sports knowledge, and good relationships with surrounding communities (Wright and Côté 2003). For this reason, the application of SEM as an intentionally structured model with leadership content can develop experiences from several aspects, especially leadership, then the structured SEM without leadership content.

Handball learning through the sports education model did not have a significant difference between the group with leadership content and the group without leadership content. For this reason, the simulated leadership program in the model provided a positive increase in both groups. It was also explained that SEM provided benefits for those who participated as an investment for improving game performance, as well as improving skills for students who had few opportunities. In addition, students will also get investment to develop more skills by giving them responsibility, self-confidence, socializing, being together, and enjoying activities happily. The results of other studies explain the advantages of the sports education model in improving students' game performance related to motor skills mastery, hence this model is the key to better learning outcomes. It emphasizes that the specific configuration of the form of game played by students is possible to develop student game performances (Sinelnikov and Hastie 2012). The description of the handball game instructional model with leadership content on the application of SEM shows the same effect based on the mean score of the group (8.87) and the mean of performance (8.78). The influence of the leadership content on the game's performance mastery was not different based on the mean score (4.22) and the mean performance score (10.10) of the group without leadership content. It shows the importance of the integration of the leadership values in the application of learning models in schools because there is a better influence on leadership development to be a concern for teachers and coaches to develop leadership materials as the most important part of physical education learning and coaching in a sports club. For that reason, students and athletes obtain meaningful life experiences through real sports activities from the beginning.

The significant difference is illustrated in the difference of the contribution of development increase (92.2%) and games performance increase (70.7%). In this case, the leadership development through an intentionally structured sports education model (SEM) had a greater influence compared with the game performance of students who took Handball Course III. According to the theories and the results of research, planning a well-simulated program affects the increase of these two variables. For this reason, training carried out in schools and educational institutions should emphasize the intentional integration of program contents in the application of the right model.

So far, coaches, teachers, and students have paid less attention to the meaning of sport values, which have benefits for the development of everyone, in participating in sports activities. It is in line with the research studying the positive effect of participation in recreational sports on the development of student leadership skills carried out using (SLSI), which found that the recreational sports are applied to provide further research documenting the impact of sports clubs on the development of leadership skills (Hall-yannessa, Forrester, and Ph 2003). Intentionally structured programs gained a higher score on the quality of positive youth development programs than unstructured programs, where the intentional sports scores were significantly higher in some programs (Bean and Forneris 2016). The results of these studies show that sport can be developed through a successful planned leadership program. Body intensity includes knowledge exemplified in many ways in the field of sport (Breivik 2008, 2017).

CONCLUSION

There was a 27% difference in leadership development in the simulated SEM group and not simulated SEM group. Meanwhile, related to the game performance aspect, there was a good influence on both groups. Leadership had a greater influence than game performance with a 22% difference. The valuable values experienced in handball learning through the sports education model are useful for the students and coaches and can be implemented in sports clubs, as well as informal educational institutions from elementary school to college levels.

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