

# The Influence of Outdoor Recreation and Physical Fitness on Teenagers' Teamwork

Wulan Nurlaela, Ryan Abu Bakar, Amung Ma'mun and Surdiniaty Ugelta  
*Faculty of Sport and Health Education, Universitas Pendidikan Indonesia,  
Jln. Dr. Setiabudhi No. 229 Bandung, Indonesia  
wulanurlaela@student.upi.edu*

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Abstract: This research paper discusses the improvement of teamwork as a result of an intervention in the form of outdoor recreation. The aims were to find out the influence of outdoor recreation and physical fitness on teamwork, to find out the influence of hiking and outbound activities and of high physical fitness on teamwork, and to find out the hiking and outbound activities and of low physical fitness on teamwork. To achieve these aims, a factorial experimental study design was employed. The samples were 60 people aged 12-15, consisting of 50 females and 10 males and chosen using a convenience sampling technique. The data were analyzed using ANOVA by means of SPSS 22.0. The results revealed that outdoor recreation positively influenced teamwork.

## 1 INTRODUCTION

The development stage of the teenagers is a transition period from kids to adult age, not only psychological changes but also physical changes (Hurlock, 2007). These changes are shown with the presence of high sensitivity and lability, full of passion and emotion instability, this caused the teens to be easily influenced by the always changing environment, hence it leads to the maladaptive behaviour, such as aggressive behaviour (Winters, 2015). Based on the data from KPAI, the bullying trend whether it is or verbal bullying shows an increasing number yearly, in 2011 up to August 2014, the KAPI recorded 369 cases, this number is about 25% of the total cases in education field with 1.480 cases, the total number of the bullies at schools increased from 67 cases in 2014 to 79 cases in 2015. This shows the teenagers' social needs and if urgent, it may allow the occurrence of continuous interaction among group members so there is an attraction in doing teamwork (Thomas, 2015). The hiking and outbound activities which involve physical activities can make the students to keep moving in doing the activities, further hiking and outbound have teamwork elements (Umar, T. 2011).

Generally, recreation can be divided into two big groups, namely indoor recreation and outdoor recreation (Reis and Higham, 2009). Several outdoor recreation activities are hiking and outbound, the activities that have a more specific concept and goals were known and liked by all people and were a training activities liked by schools, government institutions, general society, and private enterprises (Lee and Funk, 2011). Hiking is a nature adventure by walking, several benefits of walking is to be able to reach any destinations in the nature, besides, by hiking, people may face various obstacles and hurdles, such as narrow, uphill or downhill paths, meadows, thorn bushes, slippery grounds, rocks, riverways along with wind, rain, heat and cold as learning materials (North, 2015).

Other than hiking, there is also an outdoor recreation model such as outbound. Outbound is derived from the word boundaries which means to step out of the bound. A marine term which based on the outbound term is a process to look for experiences through nature (Smith et al., 2016). The goals of outbound generally are to grow self confidence in order to give self-therapy process (for those with abnormality) in communication, and to create an understanding toward each other so that trust of each other can be achieved (Dyment, et al., 2014). Physical

fitness is one of the factors for the students to join hiking and outbound as the outdoor recreation program that help the learning process (Remington and Legge, 2016). Since, physical activities are known to have an important role in sports for students, the proper physical activities can help the students or athletes do the sport well (Paradisis, et al., 2014).

After knowing the students' physical fitness, then the students' teamwork development will be observed through this hiking and outbound recreation programs, teamwork is one of the social interaction form in which there is a certain activity targeted to achieve team's goal by understanding each other's activity (Binford and Robertson, 2009). Teamwork is an effort to reach common goals that have been determined through task divisions and not as a task cutting but as a work unit where everything is directed to goals achievement (Johnson and Johnson, 2000). A team is a small group of people with supporting skills that have a commitment toward the same goals and intention, work goals and approach as well as mutual responsibility (Sofa, 2003).

## 2 METHOD

### 2.1 Participants

The participants in this research are 60 students of 2 Ciawi Public Junior High School with the age of 12-15 years old, consist of 50 females and 10 male students.

### 2.2 Instruments

#### 2.2.1 Outdoor Recreation Treatment

The instruments used in this research is the treatment. The outdoor recreation treatment was conducted regularly with the frequency of twice a week. It was conducted every Saturday and Sunday for a month in which the four students group were given outdoor recreation treatment such as hiking and outbound were given based on their physical fitness. Every meeting was conducted for 4 hours.

#### 2.2.2 Teamwork Questionnaire

This research used the questionnaire arranged from the teamwork components based on the size of the team, team members' skills, mutual responsibility as well as team cohesiveness (Sofa, 2003).

### 2.3 Procedures

The process of this research was started by initial test using the teamwork questionnaire to the groups of high and low physical fitness students. After the test was given the treatment for eight meetings each week with two meetings frequency, the application of the outdoor recreation program was conducted based on the process of the activities, started from the presence of the hiking and outbound. After the treatment, then the final test was conducted, this test was conducted to find out how the teamwork of the students after given the treatment.

## 3 RESULTS

The review on the data processing was for the normality and homogeneity tests, thus this research is normal and homogenous. After that, the data processing was conducted using the variance analysis (Anava).

The aim of the data testing was to test the presence of the influence and interaction between the free variable (the outdoor recreation and physical fitness) toward the bound variable (teamwork). The hypothesis test in this research was conducted in the significance level ( $\alpha = 0,05$ ), with  $f_{table}$  of 2,76 and  $q_{table}$  of 3,01. The result of the test can be seen in Table 1.

Table 1: Test result.

| Variable | A <sub>1</sub> vs A <sub>2</sub> |                | A vs B         |                | A <sub>1</sub> B <sub>1</sub> vs A <sub>2</sub> B <sub>1</sub> |                | A <sub>1</sub> B <sub>2</sub> vs A <sub>2</sub> B <sub>2</sub> |                |
|----------|----------------------------------|----------------|----------------|----------------|--|----------------|--|----------------|
|          | F <sub>o</sub>                   | F <sub>t</sub> | F <sub>o</sub> | F <sub>t</sub> | Q <sub>o</sub>   | Q <sub>t</sub> | Q <sub>o</sub>   | Q <sub>t</sub> |
|          |                                  | 0,05           |                | 0,05           |  | 0,05           |  | 0,05           |
| Teamwork | 0,44                             | 2,76           | 2,27           | 2,76           | 2,15   | 3,01           | 0,80   | 3,01           |

Based on Table 1, the value of  $F_0 = 0,44$  was less than the value of  $F_t = 2,76$  therefore, it can be concluded that there was relatively no significant difference of hiking and outbound toward the teamwork of the teenagers.

Further, based on Table 1 the value of  $F_0 = 2,27$  was less than the value of  $F_t = 2,76$ , it can be concluded that there was no interaction between the outdoor recreation program (hiking and outbound) and the physical fitness toward the teamwork of the teenagers.

After the test was conducted by the variance analysis (Anava), then it was followed by the Post Hoc Test. The Post Hoc Test was conducted as the advance test that assessed the presence of significant difference of the groups. The Post Hoc Test was conducted by the Turkey Test to compare the hiking

and outbound program and the group level of the physical fitness.

Based on Table 1, the value of  $Q_{\text{count}} (Q_c) = 2,15$  was less than the  $Q_{\text{table}} = 3,01$  or,  $Q_{\text{count}} < Q_{\text{table}}$  at the significance level of 0,05, therefore it can be concluded that there was a significant influence difference between the hiking and outbound program toward teamwork of the teenagers in the group of high physical fitness.

Further, still based on the Table 1, the value of  $Q_{\text{count}} (Q_c) = 0,80$  was less than the value of  $Q_{\text{table}} = 3,01$  or  $Q_{\text{count}} < Q_{\text{table}}$  at the significance level of 0,05, it can be concluded that there is no significant difference between the hiking and outbound toward the teamwork of the teenagers in the low physical fitness group.

## 4 DISCUSSION

At the beginning, the researcher saw the samples position, but in reality, hiking and outbound was not hard to differ and tend to be similar. Therefore, it did not raise any significant difference between hiking and outbound toward the teamwork of the teenagers. Although there is no overall difference in this research, for the next research, it is expected to look for other forms of variable to allow the gain of other research's information. So that it is expected to achieve new and more beneficial conclusions in developing the outdoor recreation field (Thornburg, 2010).

This research revealed that there was no interaction between the outdoor recreation program (hiking and outbound) and physical fitness toward the teamwork of the teenagers, however the outdoor recreation program with hiking and outbound gave a positive result to the teamwork, this was caused because of several factors, the situation of the students, from the incorrect choice of instruments, the tired condition of the students while performing the test, skill difference of each of the student. This is the one that later affects the results of the research (Dyment and Potter, 2015).

In the high physical fitness level, there was no significant difference between the hiking and outbound program toward the teamwork of the teenagers in the high physical fitness. This was because at the time of the sampling of the high and low physical fitness did not consider the range of the sampling (Ramsbottom, et al., 2010), where the high and low physical fitness students were supposed to be given distance, for instance ten different people in average physical fitness should be removed,

eliminated in the statistic counting (North and Brookes, 2017).

The same thing goes to the low physical fitness which had no significant effect between the hiking and outbound program to the teamwork of the low physical fitness teenagers. This is the same with the high physical fitness since at the time of sampling between the high and low physical fitness did not count the range of sampling (Ho, 2014). In which the high and low physical fitness students were supposed to be given range, for instance ten different people in the average physical fitness should be removed, eliminated in the statistic counting (Balish, et al., 2016).

## 5 CONCLUSIONS

Based on the explanation of the data analysis, it can be concluded that there is no significant difference between the hiking and outbound program toward the teamwork of the teenagers. (1) There was no interaction of the outdoor recreation (hiking and outbound). (2) There was no significant difference between the hiking and outbound program toward the teamwork of the teenagers in high physical fitness group. (3) there was no significant different between the hiking and outbound program toward the teamwork of the teenagers in low physical fitness group.

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