# The Effect of Outdoor Education on Students' Cohesiveness and Communication

Adli Hakama, Amung Ma'mun, Kardjono Kardjono and Ryan Abu Bakar Universitas Pendidikan Indonesia, Jln. Dr. Setiabudhi No. 229 Bandung, Indonesia hakamaadli@gmail.com

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Abstract: The aim of this study was to find out the effect of outdoor education (OE) on students' cohesiveness and

communication. To this end, an experimental study was carried out involving 80 students. 40 of them were assigned to the experimental group, and the other 40 to the control group. The obtained data were analyzed using a one-way ANOVA. The results revealed that OE significantly influenced students' cohesiveness and communication. It was concluded that students who received OE actively participated in the interaction with

their peers.

### 1 INTRODUCTION

Students' behavior do not solely change without any reasons (English, 1995). The change was not only caused by internal factors from within oneself but also from external factor or the environment that affects the change in the students (Schellens, van Keer, Valcke, and de Wever, 2007). The change must be performed in periodic and organized training form so that the change process can be actually seen and in accordance with the expected aims (Hodge, 2014). One of the development stages faced by an individual is puberty. The principles in the social skills training, an individual is deemed as a person that already knows or has a skill incomprehensively. In the 'learning for adults' technique, there are some principles that support the changes in behavior. The active involvement in the learning experience can be a foundation to an optimal learning transfer and not only as a passive receiver of information (Park, 2003). The last but not least principles in the training is that learning process is indeed an experience which is started from the students who train and it happens inside the students' selves, hence the students are not taught, but given motivations to look for new knowledge, skills and behavior by digging up resources within themselves (Ohrt, Robinson, and Hagedorn 2013). The skill values including cohesiveness, communication and teamwork. The skills to praise, complain because of disagreement of things, reject others' requests, exchange experiences,

fight for their personal rights, give advices to others, conflicts or problems solving, correspond or work together with people from of opposite sex, communicate with older people or people from higher positions, and several other behaviors related with the skills that are not owned by the clients (Keyton, 1994).

Teenager's social needs urged the cohesiveness. This urgency allowed the occurrence of a continuous interaction between group members so that there would be attraction to work together, thus cohesiveness in the group would appear (Rogat and Linnenbrink-Garcia, 2011). Cohesiveness is also affected by the amount of time spent together by the group members (Slater and Sewell, 1994) (Jacob and Carron, 1998). The presence of cohesiveness in the class allowed the consequences that will be received by the members of the group, such as participating in group meetings, being more prepared in tasks and proactive in obeying the norms of the group (Nibler and Harris, 2003). There are several other conditions that usually arise as a result of the group with high cohesiveness, it is the increasing will of the members to participate in every group activity (Bergart and Clements, 2015). The high cohesiveness level is not always positive, it can also lead to the negativity (Taylor, Doria, and Tyler, 1983). The communication in life became one of the bridges to lead us to various necessity, therefore, communication is an important part of the life. Also in the daily life, we tend to spend time to communicate other than other activities and it can be confirmed that we communicate in every

single aspect of life (Durant and Shepherd, 2009). Through communication, one can understand his fellow and find out information about the surrounding so that he can take measures and decisions as the response of the given information (Scollo and Carbaugh, 2013). The interpersonal communication is the most effective form of communication in changing behavior, opinions, perceptions and attitude compared to other forms of communication (Wahlström, 2010). The interpersonal communication occurs between two or more people with a face to face conversation along with the media and the presence of direct and conscious feedback. In interpersonal communication, the deep and detail communication may take place since communication is dialogical and the communicants can talk about private matters. The level and context of the interpersonal communication represent the smallest human interaction unit before entering various levels, namely: group communication, organization communication, public communication, and mass communication (Powers, 1995).

The phenomenon of students' inability in interpersonal communication needs to get special attention from all of the teachers in school. One of the development that needs to be achieved by the students at school is the personal-social development, particularly the interpersonal communication skill development. The difficulty faced by the students are generally caused by the students who still lack of communication skill particularly in communicating with other people in school environment. Therefore, it caused the students hard to adapt directly, failed to be assertive and expressed their feelings. Considering the issues happened recently where there were lots of juvenile delinquency issues which happened because the students are all in the same teen age that need the fulfillment of social needs and recognition from their peers. Thus the presence of the negative cohesiveness caused by the lack of communication between the students that lead to the unwanted events (da Conceição-Heldt and Meunier, 2014), this can be minimized by consulting the result of the previous research conducted toward the function of communication and cohesiveness and how to realize it in groups (Zaccaro, 1991). This issue cannot be left since it affects the achievements and social interaction of the students.

Learning activity in the nature, hill, mountain, and forest can be an unlimited adventure and learning place where the outdoor class has lots of potential to improve the cognitive and physical aspects of the students (Storli and Hagen, 2010) (Humberstone and Stan, 2012) (Waite, Bølling, and Bentsen, 2016)

(Davies and Hamilton, 2016). There are three related formulas in the learning performed in the nature, namely, adventure/challenge aspect, outdoor aspect and education aspect (Martin and Ho, 2009), (Karppinen, 2012). The adventure in the nature along with camping education experience provide lots of different challenges and difficulties. The students are required to adapt with the nature (Zimmermann and Saura, 2017), for example when they walk along the river, hike the hill, make the tent, and do challenge activities or other adventures. Therefore the interaction communication will be made and the teamwork from the group member will be built. The benefits of the Outdoor Education is very big mainly in shaping the character and social values (Kelk, 1994) (Stewart, Harada, Fujimoto, and Nagazumi, 1996) (Potter, Socha, and O'Connell, 2012) (Ooko, Muthomi, and Odhiambo, 2015) (Atencio, Tan, Ho, and Ching, 2015). By giving the typical contribution through sharing experience with other people, the experience found is very educative (Taniguchi, Freeman, and Richards, 2005), meaning that the experience give a deep impression and beyond the experience that merely a transaction of a person and the environment (Stewart et al., 1996) (Rea and Waite, 2009). The challenging surrounding allows people to get around the self-belief, behavior and life values as well as study with the peers (Priest, 1986). Working together in a small group is a collective effort. Just as science or art based on field studies or challenging adventures and utilized the individuals for the comprehensive group's growth. These activities are chosen and designed to achieve the objectivity in general means (Purdie, Neill, and Richards, 2002) (Ho, 2013), particularly aimed to the behavior and social relations development. This consists of initiation, leadership, communication, decision making, teamwork, creativity, risk facing, and trust (Marinho, Santos, Manfroi, Figueiredo, and Brasil, 2017).

Consequently, a program that can give the chance and experience for the students to develop their cohesiveness and communication is needed. Through a good and appropriate learning method, it is expected that the students can improve their cohesiveness and communication skills. The method used in this research prioritized the outdoor activity education. The chosen outdoor education activity is the River camp. This activity is performed outside the class or in the nature by camping on the riverside. The education through nature will make the students happy since they not only can enjoy the view, inhale fresh air, be grateful the beauty of nature, but also they will not get bored easily (Denham and Brown,

2010). The above explanation will help the kids or youth to learn from experiences so that it is expected to be able to improve their cohesiveness and communication skills.

#### 2 METHODS

## 2.1 Design and Participants

The researchers used quasi experiment with 80 students of Putra Siliwangi Lembang Junior High School (40 experiment groups and 40 control groups).

#### 2.1.1 Measure

The instruments used in this method is the questionnaire that had been developed by the researchers, the cohesiveness questionnaire put forward by Forsyth in the book entitled Group Dynamic Fifth Edition (2010: page 118) and the communication questionnaire put forward by Peter Hartley in the book entitled Interpersonal Communication Second Edition (1999: page 53).

# 2.2 Procedure

- Determining the population, Putra Siliwangi Lembang Junior High School.
- Determining the samples of 40 people by using simple random sampling technique.
- Questionnaire trials performed to 40 students sample at another junior high school (1 Katapang Public Junior High School).
- Performing the research by distributing the questionnaire of cohesiveness and communication before going to the camp as the initial data and ended by distributing the questionnaire after the camping as the final data.
- Data processing, analysing and concluding based on the data processing and analysis.

#### 3 RESULTS AND DISCUSSION

The analysis was performed at a significance level = 0.05. Based on the data analysis and processing, the cohesiveness result is f = 45.57 and sig = 0.000, whereas the communication result is f = 29.23 and sig = 0.000.

Table 1: Statistic descriptive analysis.

	Mean $\pm$ SD
Cohesiveness $n = 40$	$5,58 \pm 7,291$
Communication n = 40	$6,58 \pm 8,336$

The result of this research shows that the outdoor education program gave a positive impacts to the social values (cohesiveness and communication) of the students. The count result of the data analysis performed is as follows:

The result of the data analysis performed whether as data description analysis and data frequency analysis as well as hypothetical statistic test analysis showed a significant result of outdoor education toward the students' cohesiveness. The result was also supported by several theories which stated that outdoor education was an education that uses outdoor learning experience for one's development. Rickinson 2004 stated that "The intended outcomes of outdoor learning, meanwhile, can include: behaviours such as group interactions or personal coping strategies" which means that the result given by outdoor education includes behaviour such as group interaction or self-handling strategies. Further Ibid stated that "Outdoor Adventure Activity (OAA) provided many opportunities for them to build their confidence, skills and abilities in both cooperative and competitive situations" which means that the OAA gives lots of chances for them to build confidence, soft skills and ability in cooperative and competitive situations. Furthermore in the research by Farnham and Mutrie (1997), the study of a four-day residential outdoor education programme for 19 young people (13-17 years) they found evidence of (i) a decrease in tension and anxiety, and loud and aggressive behaviour within the group; and (ii) an improvement in overall group cohesion, such as willingness to participate in extra-curricular activities and group discussions". It can be defined that the outdoor education program for teenagers can improve the students' cohesiveness.

The result of the data analysis performed whether as data description analysis and data frequency analysis as well as hypothetical statistic test analysis showed a significant result of outdoor education toward the students' communication. The result was also supported by the theory of Rickinson (2004) which stated that outdoor adventure programmes can impact positively on the teenagers' attitudes, beliefs and self-perceptions – examples of outcomes include independence, confidence, self-esteem, locus of control, self-efficacy, personal effectiveness and coping strategies, interpersonal and social skills –

such as social effectiveness, communication skills, group cohesion and teamwork.

The above mentioned statement means that the outdoor education programmes affect the teenagers positively, particularly in the social values, communication. Further, Hattie et al (1997) clearly stated that "in our meta-analysis, across all interpersonal dimensions, there are marked increases as a consequence of the adventure programs [...] It certainly appears that adventure programs affect the social skills of participants in desirable ways," which means outdoor education can improve all interpersonal communication dimension.

Furthermore, in a one month period, the writer took the post-test data in order to find out whether after a one month intervention of outdoor education and river camp learning experience through the experiential method showed an applied impact on the students' cohesiveness and communication. The average cohesiveness data result achieved was 138,07 compared to the average pre-test data which was 133,6, while the average data for communication was 133,38 compared to the average pre-test data which was 124,78. This showed that the intervention of outdoor education with the river camp learning experience was still applied even though the average results was lower than the initial post-test after the treatment. Considering this result, it can be concluded that the outdoor education program through the experiential learning method in improving or developing the students' social values (cohesiveness and communication) is very important.

#### 4 CONCLUSIONS

In accordance with the data processing and analysis, it can be concluded that the Outdoor Education (OE) or the education in the nature gave such big impact to the students in gaining experience and reflecting it in their routines and was relatively applied for one month, this is very important since the OE can give a significant change toward the social values particularly the cohesiveness and communication. Through OE, the students will actively participate in interacting with other students so that it will lead to positive outcomes and minimize the juvenile delinquency that often occur. Therefore, the OE is suggested to be applied as one of the learning materials related with physical education at schools.

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