Gender Anxiety Control Through the Outdoor Education Program

J Kardjono
Faculty of Sport and Health Education, Universitas Pendidikan Indonesia, Indonesia

*haruni.anajohn@gmail.com

Abstract. Physical Education programs that focus on the physical, social, mental, and emotional development such as found in Outdoor Education programs, might be implemented as a potential activity to improve anxiety control. The purpose of this research is to investigate the effects of an Outdoor Education’s Hiking program based on Experiential Learning method on gender anxiety control. The subjects consisted of 62 male and 16 female students from the Physical Education and Health Department at the Indonesia University of Education. Subjects were divided into an experimental and a control group. The Anxiety Scale consisted of 24 questions modified from The Liebowitz Social Anxiety Scale (LSAS) developed by Liebowitz. (1987). The results after four weeks intervention (12 sessions) showed that male experimental group has significant difference on control level of anxiety compared to the female experimental group (0<0.25). From the result of this study it can be recommended that the Outdoor Education Hiking program through Experiential Learning methods can be implemented as a method to control anxiety especially for male.

1. Introduction

Anxiety is part of the basic emotions which often overwhelm humans. According to Goleman (1995:66), Anxiety is stressful to one’s mental health and causes disorders such as, “phobias, obsessions and compulsions, panic attacks.”

According to Bucher (1979), in the future education will utilize experiential learning programs more and more, giving individuals more opportunities to apply their knowledge and experience. The three aspects of physical education introduced by Bloom and Krathwol (1956) are included in Outdoor Education experiences, which provide students with learning activities about a particular situation (cognitive objective), the appreciation of learning experiences (affective objective), and the emotional and skill aspects derived from participating in an outdoor experience (psychomotor objective). Bucher further argued that “Every learning experience should be examined in terms of how its teaching can be enhanced through outdoor education.” According to Priest (1997) in Taniguchi (2004:45), “Outdoor education creates events that put students into problem solving predicaments and the decisions they make impact them directly and usually quite quickly.”

Hiking or walking are basic outdoor activities which can capture beautiful places. According to Oleson (2000), hiking is “. . . one of the best exercises there is, walking, with some of the most spectacular beauty to be found on our planet, nature.” Conditions which one has to face while hiking in nature are various, such as narrow paths, savannahs, thorny bushes, slippery ground, rocks, rivers, steep climbs and downward slopes. The ability to think and make good decisions is an essential
requirement to overcome and navigate these varied conditions, including when confronting emotional stress. In addition to this, hiking outdoors demands physical and mental skills, courage, patience, caution, discipline, concentration, and teamwork among the group, which are important elements in the management of emotions.

According to Oleson (2000) “. . . hiking the wilderness is a peaceful, relaxing, and stress reducing experience most of the time even when it is challenging.” Nelson (1994:192) added that the clean outdoor air will increase “changes in the brain waves” which affect the level of relaxation and tranquility.

Various theoretical and literal studies have proven that outdoor educational programs provide meaningful learning experiences. These characteristics make outdoor education through a hiking program one of the most effective learning experiences to help solve an individual’s emotional problems. Therefore, the purpose of the present study was to observe whether outdoor education through a hiking program can also have an affect on emotional experiences, particularly in controlling basic emotional anxiety.

2. Method

2.1. Subjects
The subjects who participated in this study consisted of 62 male and 16 female freshman students (analyzed separately) from the Physical Education and Health Department at the Indonesian University of Education. Ages typically ranged from 18 to 20 years. The subjects were divided into two groups: an experimental group and a control group.

Anxiety scale test was used to measure the effects of the outdoor education hiking program on both groups. The tests were conducted on two occasions, comprising a pre-test and a post-test.

1. Experimental Design

| Pre Exp. | Post Exp. |
|----------|-----------|
| 01       | 02        |
| Exp. Variable | Exp. Variable |
| 01       | 02        |
| Cont. Variable | Cont. Variable |

2. Hiking program
The researcher chose a 4 week Hiking Program, with a frequency of hiking 3 times in one week. To implement this program, the difficulty of the hiking was gradually increased, from the easiest and safest hiking to quite strenuous and challenging hiking. During the activities, subjects were encouraged to enjoy and learn about nature and to freely meditate on it with their own minds and feelings.

3. Scale Test
The Anxiety Scale consisted of 24 questions from The Liebowitz Social Anxiety Scale (LSAS) developed by Liebowitz (1987).

4. Statistical Analysis
The data of this study was computed by the standard deviation and average of measuring value using SPSS/PC 12.0 Paired t-tests to compare data before and after the intervention and an independent t-test (p<0.25, p<0.05) was used to investigate the difference between groups.
3. Results

![Figure 1](image1.png)

**Figure 1.** The Effect of the Hiking Program on Males' Anxiety Control

![Figure 2](image2.png)

**Figure 2.** The Effect of The Hiking Program on Females' Anxiety Control

4. Discussion of Findings

Both the male ($\alpha = 0.05$) and female ($\alpha = 0.25$) participants in the wilderness Hiking program showed an improvement in the ability to control anxiety. Generally, emotional states tend to be unstable in stressful situations, and may be very different between men and women. According to Zap (1998) “Women tend to act on feelings much more than men do” Perhaps for a number of women, feelings can tend to outweigh the rational in many situations.

Also the research results found that male of the control groups showed increase in ability to control anxiety ($\alpha = 0.05$), researcher assumption, the daily exercise of subjects from physical education give some effect to shift anxiety. This finding supports the theory proposed by neuro-scientist Joseph...
LeDoux (2001) in Ratey & Hagerman (2008:105) in his article entitled “Overcoming Anxiety through Active Coping.” LeDoux explained that, “active coping means doing something in response to whatever danger or problem is causing anxiety rather than passively worrying about it.” Active coping, according to LeDoux, refers to a physical action (exercise).

According to Oleson (2000), through activities such as the hiking program, individuals may gain more peaceful, relaxing and stress reducing experiences. Another benefit obtained by the subjects of the experimental group was that they were exposed to greater supplies of fresh air in the rich outdoor environment. Nelson (1998), explained that the cleaner the air such as in mountain areas, the greater its ion content. There are two or three million ions in each breath we take in such locations, and that is five to ten times more than the recycled air in polluted cities. Nelson further explained that a person who lacks oxygen often experiences headaches and is easily offended, while extra oxygen will clear someone’s mind and develop a fresh perspective.

5. Conclusion
The results of the four week intervention showed that the Outdoor Education hiking program had significant positive effects on the levels anxiety control. An Outdoor Education Hiking Program can create an experience of “active meditation,” especially when the subjects focus more on a reflective situation rather than just concentrating on reaching the destination.

References
[1] Bucher, Charles A. (1979). Foundations of Physical Education, The C.V. Mosby Company.
[2] Goleman, Daniel. (1995). Emotional Intelligence. New York. Toronto. London. Sydney. Auckland. Bantam Books.
[3] Liebowitz, MR. (1987). Liebowitz Social Anxiety Scale. C:\Documents and Settings\ Windowz XP\My Documents\The Anxiety Community - Social Anxiety Disorder Liebowitz Social Anxiety Scale.htm.
[4] Nelson, Ethel. R. (1994) Delapan Obat Alami. Indonesia Publishing House. Bandung.
Oleson, Eric. (2000) Hiking. http://www.amazon.com/exce/obidos/redirect-home/hiking/ website.
[6] Ratey, John J. & Hagerman, Eric. (2008). Spark. The Revolutionary New Science of Exercise and The Brain. New York. Little, Brown and Company.
[7] Snell Jr, William E., Scott Gum, Roger L., Shuck, Jo A. Mosley, dkk. (1995). http:// w w w4. semo.edu/snell/scales/CAS.HTM.
[8] Taniguchi, Stacy T. (2004). Outdoor Education and Meaningful Learning. Ph.D. Dissertation. Brigham Young University.
[9] Zap. (1998). Feelings Are Not Rational or Logical. C:\Documents and Settings\ Win dowzXP\My Documents\Feelings and Rational 1.htm.