



Available online at:

<https://ejournal.upi.edu/index.php/penjas/article/view/22584>DOI: <https://doi.org/10.17509/jpjo.v5i1.22584>

The Effect of Short Term Adventure-Based Outdoor Program on Decreasing The Stress Level of College Students

Vicki Ahmad Karisman*, Dedi Supriadi

STKIP Pasundan Cimahi

Article Info

*Article History :**Received December 2019**Revised December 2019**Accepted February 2020**Available online April 2020**Keywords :**Adventure, Outdoor Program, Stress*

Abstrak

Stres pada mahasiswa dapat mempengaruhi kehidupan dan aktivitas perkuliahan. Program penelitian ini diharapkan dapat membantu mahasiswa dalam mengurangi tingkat stress. Tingkat stress akan menentukan jalannya kehidupan mahasiswa. Salah satunya pada penyelesaian studi. Tujuan penelitian ini untuk mengetahui dampak dari aktivitas petualangan jangka pendek terhadap pengurangan stress mahasiswa. Metode penelitian eksperimen digunakan dengan desain pretest and posttest group design. Populasi penelitian ini mahasiswa yang mengikuti program rekreasi dan outdoor dengan partisipan sebanyak 83 orang, laki-laki 70 orang dan perempuan 13 orang dengan dengan rata-rata usia perempuan ($\pm 21,3$ tahun) dan laki-laki ($\pm 21,5$ tahun). Program dilakukan selama enam bulan, dilakukan seminggu sekali selama 2 jam. Instrumen yang digunakan dalam penelitian ini Perceived Stress Scale, dengan tingkat reliabilitas sebesar 0,871. Aktivitas yang dilakukan meliputi, hiking, outbound dan berenang. Data dikumpulkan melalui 14 pertemuan diolah melalui SPSS 20. Hasil perhitungan menunjukkan bahwa terdapat pengaruh yang signifikan dari petualangan jangka pendek terhadap pengurangan stress pada mahasiswa. Sehingga melalui program ini dapat mengatasi stress pada kalangan mahasiswa secara berkesinambungan.

Abstract

This study was aimed at recognizing the effect of short-term adventure activities on decreasing college students' stress. The programs administered in this study were expected to be able to help the college students in managing and decreasing their level of stress. The level of stress might affect their live, for instance affecting their study. This study was an experimental research with one-group pre-test post-test design. The population of this study were 83 college students taking the outdoor and recreation program. The program was conducted within 6 months, once a week with 2 hours per session. The instruments used in this study were Perceived Stress Scale, with reliability 0,871, and activities including hiking, outbound, and swimming. The data were gathered in 10 meetings that were processed by SPSS 20. The result showed that there was a significant effect of short-term adventure activities on decreasing the college students' stress.

INTRODUCTION

College students are vulnerable to experiencing pressure and problems in their life. Learning activities with a number of tasks should be completed in a short of time. The academic tasks could be the trigger of college student level of stress. The study of literature discovers that the level of stress on teenager is relatively high. The number of college students experiencing academic stress increases in every semester. The most common stress experienced by the college students is academic stress. Academic stress is defined as a state in which an individual get a pressure as the result of their perception and appraisal of academic stressors related to knowledge and education in higher education (Suwartika, Nurdin, & Ruhmadi, 2014).

During completing their academic activities, college students have a variety of apprehensions. The three main apprehensions include academic performance, pressure to be successful, and the plan after graduation. Demographically, the students who experience the highest level of stress are mostly the transfer students, senior students, and those who live outside the campus (Beiter et al., 2015). (American College Health Association, 2014) reports that experiencing stress become the most influential factor on their academic achievement. The students also experience a high stress level during conducting academic activities (Hodselmans et al., 2018). The negative impact of stress involves the difficulty to pay attention during the lecture (Gamayanti, Mahardianisa, & Syaifei, 2018).

A prolonged stress will affect the academic process of the students. It would also have impact on their focus during learning, cause sleep problem, and trigger their unwillingness to follow teaching and learning activities to drop out (Simbolon, 2015). The suitable treatment could decrease college student level of stress. One of the treatments is conducting an outdoor activity program. The outdoor activity gives opportunities to the students to directly interact with the nature. The positive aspect could be cultivated through outdoor activities (Karisman & Supriadi, 2018).

A structured outdoor program can have a function as the prevention of the negative impact of excessive screen viewing (such as viewing hand phone, tablet, and computer) (Mutz & Müller, 2016). Furthermore,

outdoor education activities provided with discussion is proven to be more effective in increasing the student knowledge of problems and problems in their surroundings (Ajiboye & Olatundun, 2010). Outdoor adventure education can be used as a social integration process since outdoor context could support the social and interpersonal skills (Ooko, Muthomi, & Odhiambo, 2015). The moderate recreation activities, such as walking, is the best outdoor activity to improve mental health, while having a talk could decrease anxiety and restore attention; while accessing internet and sport, both of them, fail to improve mental health significantly (Weng & Chiang, 2014). In addition, outdoor activities are better for restoring attention than indoor activities. The short-term Adventure-based Outdoor Programs (AOP) provide opportunities to college students to step aside of daily challenge and eventually reduce the level of psychological stress of the students and offer a tentative help for their level of physiological stress (Alan & Aiko, 2016). There is no significant difference of students' level of stress related to gender and outdoor adventure activities (Chang, Davidson, Conklin, & Ewert, 2018).

The level of academic stress is mostly in the high level of stress. The level of stress related to intrapersonal and interpersonal is mostly in the high level of stress. The level of stress in teaching and learning is mostly in the moderate level of stress. The level of stress related to social relationship is mostly in the moderate level of stress. The level of stress related to desire and control is mostly in the moderate level of stress. The level of stress related to group activities is mostly in the moderate level of stress. The stressor that has the highest impact is in the intrapersonal and interpersonal aspects. The statement causes a stress the most is obtaining a low score (Rahmayani, Liza, & Syah, 2019). In this research, students are guided to participate in the outdoor education program. The type of activities conducted included hiking, team games, and orienteering. The adventure-based outdoor activities conducted was aimed at decreasing the level of stress of the students.

METHODS

The method used in this study was experimental method with the randomized pretest and posttest group design. The population of this study were the semester 5 STKIP Pasundan students majoring recreation education program aged $\pm 21,3$ years for female and $\pm 21,5$ years for male. The samples of this study were 83 students (70 males; 13 females) taken through cluster random sampling. The instrument used in this study was Perceived Stress Scale (State of New Hampshire Employee Assistance Program, 1983). This instrument had been retested for its validity and reliability. The reliability was 0,871. This research was started by pretest followed by treatments. The treatment was conducted in ten meetings, once a week for two hours following the research of (Karisman, 2015).

The treatments conducted involved hiking, outbound, swimming, and camping as shown in Table 1. The activities of treatment include hiking to the hills and to waterfalls conducted twice, at the beginning and at the end of the program, outbound activities conducted twice, swimming at the river and camping conducted once in the middle of the treatment and once at the end of the program. The data obtained were analyzed by using SPSS 20 with the Paired Sample t-test analysis.

Table 1. Treatment Activities

No	Activities	Session
1	Pretest	
2	Hiking to the hills	Session 1
3	Hiking to waterfalls	Session 2
4	Outbound 1	Session 3
5	Outbound 2	Session 4
6	Swimming at the river	Session 5
7	Camping	Session 7
8	Hiking to the hills	Session 8
9	Hiking to waterfalls	Session 9
10	Camping	Session 10
11	Posttest	

RESULT AND DISCUSSION

This research had been conducted for four months and was in line with the planned schedule. The following is the result of the data analysis:

Table 2 shows that the result is significant $0,000 < 0,05$ which means that there was a significant effect of the short-term adventure on the stress level of the college students. The result shows that there was a significant effect of short-term adventure on the student stress level. It is because outdoor education could develop various psychological aspects through the intervention (Sheard & Golby, 2016).

Outdoor education is built on the wide multidiscipline theories and practice to develop and widen the base of knowledge to provide a meaningful development opportunity to develop outdoor knowledge and skills, personal development, and the sustainability of the environment (Potter & Dymont, 2016). The advantage of documented recreation, especially outdoor recreation, vary and include physiological advantage (such as cardiovascular fitness improvement) and various mental health, such as reducing stress and depression symptoms, developing subjective wellbeing, and improving the peer support socially (Amy & Eddie, 2017).

The outdoor education activity is conducted to achieve the goals, to take the risk, to push personal limits, to deal with fear and the sensation of the body to have a deeper connection with others and nature (Kerr & Houge Mackenzie, 2012). Through these activities, the students could relax and lessen the stress level. The modernization has impacts on our life and psychological level. Stress is found to be lower on the people who are close to the nature (Education Scotland, 2011).

The higher stressor burden could increase anxiety and eventually affect emotional health (Anniko, Borsma, & Tillfors, 2019). The result of this research implied that stress at school and anxiety might become important targets for preventive intervention that is aimed at reducing mental health problems related to stress in teenagers. Through a suitable intervention for instance the intervention in this study, the implementation of recreation education could be a solution in reducing stress of the students. Moreover, (Crum, Akinola, Martin, & Fath, 2017) conducted research which showed that a person could increase their response on stress by adopting the more positive mindset of the stress they face. Generally, it is applied for every

stressful situation. Through outdoor activities, we are expected to have a stronger mind to reduce the stress.

Table 1. Result

Paired Samples Test		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Dev.	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Program PJP	4.501	3.072	.801	3.323	4.501	8.85	5	.000

Teenagers from all countries are competent in handling stressor. Culture has a stronger impact on stress perception and coping style than gender. The findings have some practical important implications. Doctors, teachers, and other professionals who work with teenagers and family with minority ethnic background could harvest benefits from the awareness improvement that culture background has a significant effect on how a teenager faces stress in close relationships (Persike & Seiffge-Krenke, 2016). It also shows that there is another factor causing stress besides on campus lecturing activities. Through intentional activities without seeing ethnic, culture, and economic background, the level of stress could be reduced. The level of stress of an individual is also affected by their response on the stress. The response on stress is divided into four groups including physiological stress, cognitive response, emotional response, and behavior response.

Another factor that could also affect the stress level difference is coping mechanism. The bad coping mechanism could worsen the level of stress and vice versa. If a person could fight the stress they experienced by using a good coping mechanism, the stress would decrease or even subside (Rahmayani et al., 2019). The academic stress and emotional quotient contribute on the subjective wellbeing of the students. However, the role of academic stress is found to be higher on the subjective wellbeing than on the emotional quotient of the students (Julika & Setiyawati, 2019). Through the right coping management, the level of stress could be reduced and decreased. Relevant to this study, a significant change happened to the college students who joined the recreation activities.

CONCLUSION

The short-term adventure program through hiking, outbound, swimming, and camping activities could decrease the stress level of the college students. However, a further research related to the level of stress of the college students through a clinical study by testing their level of stress through saliva is needed.

REFERENCES

- Ahmad Karisman, V. (2015). Artikel OE Self Efficacy. *Penelitian Pendidikan, Khusus(Pendidikan)*, 121–127.
- Ajiboye, J. O., & Olatundun, S. A. (2010). Impact of some environmental education outdoor activities on Nigerian primary school pupils' environmental knowledge. *Applied Environmental Education and Communication*, 9(3), 149–158. <https://doi.org/10.1080/1533015X.2010.510020>
- Alan, E., & Aiko, Y. (2016). The influence of short-term adventure-based experiences on levels of resilience. *Journal of Adventure Education and Outdoor Learning*.
- American College Health Association. (2014). *NCHA Spring 2014 Executive Summary*.
- Amy, S., & Eddie, H. (2017). Flourishing through Resilience: The Impact of a College Outdoor Education Program. *Journal of Park and Recreation Administration*, 35, 59–68. <https://doi.org/DOI: 10.18666/JPra-2017-V35-I4-7779>
- Anniko, M. K., Boersma, K., & Tillfors, M. (2019). Sources of stress and worry in the development of stress-related mental health problems: A longitudinal investigation from early- to mid-adolescence. *Anxiety, Stress and Coping*, 32(2), 155–167. <https://doi.org/10.1080/10615806.2018.1549657>
- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The

- prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90–96. <https://doi.org/10.1016/j.jad.2014.10.054>
- Chang, Y., Davidson, C., Conklin, S., & Ewert, A. (2018). The impact of short-term adventure-based outdoor programs on college students' stress reduction. *Journal of Adventure Education and Outdoor Learning*, 00(00), 1–17. <https://doi.org/10.1080/14729679.2018.1507831>
- Crum, A. J., Akinola, M., Martin, A., & Fath, S. (2017). The role of stress mindset in shaping cognitive, emotional, and physiological responses to challenging and threatening stress. *Anxiety, Stress and Coping*, 30(4), 379–395. <https://doi.org/10.1080/10615806.2016.1275585>
- Education Scotland. (2011). *Outdoor Learning: Practical guidance, ideas and support for teachers and practitioners in Scotland*. <https://doi.org/10.7721/chilyoutenvi.23.2.0220>
- Gamayanti, W., Mahardianisa, M., & Syaifei, I. (2018). Self Disclosure dan Tingkat Stres pada Mahasiswa yang sedang Mengerjakan Skripsi. *Psymphatic: Jurnal Ilmiah Psikologi*, 5(1), 115. <https://doi.org/10.15575/psy.v5i1.2282>
- Hodselmans, A. P., Hemdal, E., Lundberg, S., Bjarnegård, A., Hobbelen, H., & Svantesson, U. (2018). Physiotherapy students' perceived stress, stressors, and reactions to stressors: A comparative study between Sweden and The Netherlands. *Physiotherapy Theory and Practice*, 34(4), 293–300. <https://doi.org/10.1080/09593985.2017.1390805>
- Julika, S., & Setiyawati, D. (2019). Hubungan antara Kecerdasan Emosional, Stres Akademik, dan Kesejahteraan Subjektif pada Mahasiswa. *Gadja Mada Journal of Psychology (GamaJoP)*, 5(1), 50. <https://doi.org/10.22146/gamajop.47966>
- Karisman, V. A., & Supriadi, D. (2018). the Effect of Outdoor Education on Students' Responsibility and Selfconfidence. *Malaysia Outdoor Recreation*, 2018 (Morec), 33–40.
- Kerr, J. H., & Houge Mackenzie, S. (2012). Multiple motives for participating in adventure sports. *Psychology of Sport and Exercise*, 13(5), 649–657. <https://doi.org/10.1016/j.psychsport.2012.04.002>
- Mutz, M., & Müller, J. (2016). Mental health benefits of outdoor adventures: Results from two pilot studies. *Journal of Adolescence*, 49, 105–114. <https://doi.org/10.1016/j.adolescence.2016.03.009>
- Ooko, S. W., Muthomi, H., & Odhiambo, G. (2015). Impact of outdoor adventure education on Kenyan youth, in peace building. *World Leisure Journal*, 57 (4), 297–305. <https://doi.org/10.1080/16078055.2015.1081270>
- Persike, M., & Seiffge-Krenke, I. (2016). Stress with parents and peers: how adolescents from 18 nations cope with relationship stress. *Anxiety, Stress and Coping*, 29(1), 38–59. <https://doi.org/10.1080/10615806.2015.1021249>
- Potter, T. G., & Dymont, J. E. (2016). Is outdoor education a discipline? Insights, gaps and future directions. 9679(January). <https://doi.org/10.1080/14729679.2015.1121767>
- Rahmayani, R. D., Liza, R. G., & Syah, N. A. (2019). Gambaran Tingkat Stres Berdasarkan Stressor pada Mahasiswa Kedokteran Tahun Pertama Program Studi Profesi Dokter Fakultas Kedokteran Universitas Andalas Angkatan 2017. *Jurnal Kesehatan Andalas*, 8(1), 103. <https://doi.org/10.25077/jka.v8.i1.p103-111.2019>
- Sheard, M., & Golby, J. (2016). The Efficacy of an Outdoor Adventure Education Curriculum on Selected Aspects of Positive Psychological Development. 29(2), 187–209.
- Simbolon, I. (2015). Reaksi Stres Akademis Mahasiswa Keperawatan Dengan Sistem Belajar Blok Di Fakultas Keperawatan X Bandung. *Jurnal Skolastik Keperawatan*, 1(01), 29–37.
- State of New Hampshire Employee Assistance Program. (1983). Perceived Stress Scale Score Cut Off. State of New Hampshire Employee Assistance Program, 2. <https://doi.org/10.1037/t02889-000>
- Suwartika, I., Nurdin, A., & Ruhmadi, E. (2014). Analisis Faktor Yang Berhubungan Dengan Tingkat Stress Akademik Mahasiswa Reguler Program Studi D III Keperawatan Cirebon Poltekkes Kemenkes Tasikmalaya. *Jurnal Keperawatan Soedirman*, 9(3), 173–189. Retrieved from <http://jks.fikes.unsoed.ac.id/index.php/jks/article/viewFile/612/337>
- Weng, P.-Y., & Chiang, Y.-C. (2014). Psychological Restoration through Indoor and Outdoor Leisure Activities. *Journal of Leisure Research*, 46(2), 203–217. <https://doi.org/10.1080/00222216.2014.11950320>