

Available online at http://www.journalijdr.com



International Journal of Development Research Vol. 09, Issue, 01, pp.25280-25283, January, 2019

## **ORIGINAL RESEARCH ARTICLE**



### **OPEN ACCESS**

### **OVERCOMING STRESS BEFORE COMPETE WITH HIKING AND SOAKING IN THE RIVER**

### \*Marwan, lis

Department of Physical Education, University of Siliwangi, West Java, Indonesia

ARTICLE INFO	ABSTRACT			
Article History: Received 20 <sup>th</sup> October, 2018 Received in revised form 06 <sup>th</sup> November, 2018 Accepted 29 <sup>th</sup> December, 2018 Published online 30 <sup>th</sup> January, 2019	Stress is a subjective experience based on a person's perception of the situation someone faced or a pressing situation. How to deal with stress in athletes on preparation for a variety of ways. This study to intend determine the effect of hiking and soaking in the river on the stress level of athletes in preparation for the match. The research plan used a quasi-experimental design of non equivalent pre-test and post-test control group designs. Respondents were taken by purposive technique methodnumbers to 30 respondents from martial arts and games. Data collection use a			
Key Words:	questionnaire Depression Anxiety and Stress Scale (DASS). Data analysis using univariate analysis, namely by frequency distribution, mean value, median value and bivariate with t-test t.			
Hiking, Bathing, Stress, Match.	Mann Whitney test and Wilcoxon test. The results of this study indicate that the median value of the athlete's stress level after being given a hiking treatment and soaking in the river is 2 p.m. and 8 p.m. Based on the results of the study, the p-value of $0,0001 < \alpha (0,05)$ was obtained, so it can be concluded that there is an effect between hiking and soaking in the river towards the stress level of athletes in preparing for the match. Hiking and soaking in the river once a week to reduce the stress of athletes before the match.			

*Copyright* © 2019, Marwan, Iis. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Citation: Marwan, Iis. 2019. "Overcoming stress before compete with hiking and soaking in the River", International Journal of Development Research, 9, (11), 25280-25283.

# **INTRODUCTION**

The highlight of the athlete's training activities is the implementation of competition events or match. Athletes practice from physical training, technical, strategic and mental training for matches. The quality of the match results can be seen from the quality of the training. Athletes' problems before and after the match are faced with stress. Needlman in Santrock (2004) there are several sources of stress experienced by athletes, namely biological stress, family stress, school stress, peer stress and social stress. Social stress includes athletes who are under pressure to be champions or fear of defeat (fear of failure). The impact of stress is divided into three categories, there'sphysicological effects where in general people who experience stress, experience a number of physical disorders such as tense muscles, boredom, dizziness and increased blood pressure. Psychological impact such as emotional fatigue are the first sign and have a central role in the occurrence of burn out and decreased feeling of wanting to succeed.

#### \*Corresponding author: Marwan, Iis

Department of Physical Education, University of Siliwangi, West Java, Indonesia

Behavior impacts, for example, when stress becomes distressed, learning achievement decreases, high levels of stress have a negative impact on the ability to remember information, make decisions and take appropriate steps. Heavy stress often a lot or is not actively participating in learning activities (Privoto, 2014). Stress can be measured using the DASS scale, namely the Depression Anxiety and Stress Scale questionnaire (DASS) to measure the athlete's stress level. The effort of stress therapy and prevention in principle is divided into three groups based on their nature, namely psychological, medicinal (medical), and environmental (Hartono, 2007). According to (Gunawan, 2006), stress can still be treated or prevented, without having to go to the hospital that is by exercising, praying, relaxing, looking for friends, hugging people who are loved and medicine that are the last choice to prevent stress experienced. The way to relax the body is by do meditation or yoga. The purpose of this study was to analyze the effect of hiking and soaking in the river to reduce stress levels in athletes in preparation for match or competition events.

#### **MATERIALS AND METHODS**

This research method used a quantitative approach, the method used in this study is aQuasi Experiment. The research design

was non equivalent pre-test and post-test control group design. The research respondents were 288 athletes from the total PORDA XIII contingent in Tasikmalaya City, 30 of which were divided into intervention and control groups, with random sampling techniques. The intervention given is hiking as far as 5,000 meters followed by a soaking in the river for 60 minutes, carried out in the end of the training session (weekend). Stress level measurement using the DASS questionnaire. Data analysis using dependent t test and independent t test.



Picture 1. Hiking in the Mountains



Picture 2. Soaking in the River

### RESULTS

Table 1. Frequency Distribution of Stress Levels Before Given Treatment in Experimental Groups and Controls Experiencing Stress in Preparation for Facing Events

Stress Level	Treatment G	roup	Treatment Control	
	Frequency	Persentage	Frequency	Persentage
Medium	20	66,7	23	76,7
Mild	10	33,3	7	23,3
Normal	0	0	0	0
Total	30	100,0	30	100,0

Based on Table 1 of the 30 respondents in the treatment group, the majority of respondents were included in the category of moderate stress levels, namely 20 respondents (66.7%) and in the category of mild stress levels as many as 10 respondents (33.3%). Whereas in the control group most respondents were included in the category of moderate stress level, namely 27

respondents (76.7%) and in the category of mild stress level as many as 7 respondents (23.3%).

Table 2. Frequency distribution of stress levels after being given hiking and soaking in the river in the experimental and control groups

Stress Level	Treatment G	roup	Treatment Control		
	Frequency	Persentage	Frequency	Persentage	
Medium	0	0	23	76,7	
Mild	12	40,0	7	23,3	
Normal	18	60,0	0	0	
Total	30	100	30	100	

Based on Table 2, it can be seen that the level of stress experienced by respondents after being given hiking and soaking in the rivershows that of the 30 respondents in the treatment group the majority of respondents were included in the category of mild stress levels, namely 12 respondents (40.0%) and in the category normal level of 18 respondents (60.0%). Whereas in the control group the majority of respondents were included in the category of moderate stress levels, namely 23 respondents (76.7%) and in the category of mild stress levels.

 Table 3. Equality of Stress Levels Before Giving Hiking and River

 Flowing in the Treatment and Control Groups

Variable	Group	n	Mean	SD	Т	p-value
Stress level	Control	30	19,83	2,379	0,899	0,373
	Treatment	30	19,30	2,215		

Based on Table 3, it can be seen that before being given hiking and soaking in rivers, the average stress level of the treatment group was 19.30, while the control group was 19.83. Based on the results of the independent t test, it was found that t count was 0.899 with p - value 0.373>  $\alpha$  (0.05), it can be concluded that there was no significant difference in stress levels between treatment groups and control groups before being given hiking and soaking in rivers.

Table 4. Analysis of Differences in Stress Levels Before and After Given by Hiking and Subterranean Submersion in the Treatment Group

Variable	Treatment	n	Mean	SD	Т	p-value
Stress Level	Before After	30 30	19,30 13,73	2,215 2,083	17,566	0,0001

Based on Table 4, it can be seen that the average stress level before being given hiking and river bathing in the treatment group is 19.30 and after being given hiking and soaking in the river to 13.73. Based on the dependent t test, it was found that t count was 17.566 with p - value of 0.0001 < $\alpha$  (0.05), indicating that there were significant differences in stress levels before and after being given hiking and soaking in the river.

 Table 5. Analysis of Differences in Stress Levels Before and After
 Given Treatment

Variable	Treatment	n	Median	p-value
			(minimum – maximum)	-
Stress Level	Before	30	20,00 (15 - 25)	0,083
	After	30	20,00 (15 - 23)	

Based on the results of the Wilcoxon test in Table 5, it can be seen the moderate value of stress levels before being given hiking and soaking in the river control groups, namely 20.00 with a minimum value of 15 and a maximum of 25, while the moderate value of stress levels after being given a hiking and river bathing control group is 20, 00 with a minimum value of 15 and a maximum of 23.Based on the Wilcoxon test results obtained with p - value of  $0.083 > \alpha$  (0.05), this indicates that there is no significant difference in stress levels before and after being given hiking and soaking in the river in athletes who are stressed in preparation for competition or competition events in the control group.

Table 6. Analysis of the Effects of Hiking and Soaking of River Flow on Stress Levels of Athletes in Preparation for the Event Event

Variable	Treatment	n	Median	p-value
			(minimum – maximum )	-
Stress Level	Treatment	30	14,00 (9 - 18)	0,0001
	Control	30	20,00 (15 - 23)	

Based on the results of the Mann Whitney U-Test in Table 6, it can be seen that the moderate value of the stress level after being given hiking and soaking in the river treatment group is 14.00 with a minimum value of 9 and a maximum of 18, while the moderate value of stress level control group namely 20.00 with a minimum value of 15 and a maximum of 23.Based on the Mann Whitney U-Test, p-value of 0,0001  $<\alpha$  was obtained (0.05), this indicates that there is a significant effect of hiking and soaking in the river on the level of stress of athletes in preparation for match or competition events. The results showed that of the 30 respondents most of the respondents were included in the category of moderate stress levels, namely 20 respondents (66.7%) and in the category of mild stress levels as many as 10 respondents (33.3%), while in the control group showed that out of 30 respondents most of the respondents were included in the category of moderate stress level, namely 23 respondents (76.7%) and in the category of mild stress level as many as 7 respondents (23.3%). As per the data obtained from respondents, the stress levels experienced are moderate stress and mild stress.

Based on the results of interviews with several athletes, they said they often felt depressed, bored and tired because of the tasks that had accumulated from the coach either from training hours or from the extra hours of training, demands to pass to win the championship. Moderate and mild levels of stress are also concluded based on the results of the DASS questionnaire that was filled in by the respondents. In connection with the existence of a competition event or race this becomes a stress trigger who experienced by athletes. This research is also in line with previous research by Kinantie (2012) where an overview of the level of stress experienced by class XII students is ahead of the national exam, which is mostly at moderate and severe levels. Previous research conducted by Muharrifah (2009) where respondents had the largest percentage in moderate stress levels. According to Needleman in Santrock (2004) there are several sources of stress experienced by athletes, one of which is school-based stress (school stress), which is where the pressure in academic problems tends to be high. The desire to get high grades or success in certain fields where athletes always try not to fail, busy learning activities, many tasks, especially fear of facing a final exam, can all cause stress. Based on the results of the Wilcoxon test in table 6, it can be seen the moderate value of stress levels before being given hiking and soaking in the river control groups, namely 20.00 with a minimum value of 15 and a maximum of 25, while the moderate value of stress levels after being given a hiking and soaking in the rive, 00 with a minimum value of 15 and a maximum of 23 and the results obtained with a p-value of  $0.083 > \alpha$  (0.05), this indicates that there were no significant differences in stress levels before and after being given hiking and soaking in the river in the control group that experienced deep stresspreparation for competition or race events.

Based on Table 2, the stress levels experienced by the treatment group were mild and normal or did not experience stress where of the 30 respondents in the category of mild stress levels were 12 respondents (40.0%) and in the nonstressfull category as many as 18 respondents (60, 0%) in the treatment group. Based on Table 4, it can be seen that the average stress level before being given hiking and soaking in the river in the treatment group is 19.30 and after being given hiking and soaking in the river to 13.73. The level of stress experienced by the treatment group experience the change, namely from moderate and mild to mild and normal. This is due to the benefits of hiking and soaking in rivers which can reduce stress and be able to increase the concentration of learning in adolescents. Based on the dependent t test, t count is 17.566 with p – valueat 0,0001  $\leq \alpha$ , this shows that there was a significant difference in stress levels before and after being given hiking and riverbed bathing in the athlets intervention group.

# DISCUSSION

Hiking has a variety of benefits, can be felt immediately, and there are also other benefits that cannot be seen directly, such as:

**Increasing the work capacity of the heart and lungs:** Mountain climbing has health benefits, can increase the work capacity of the heart and lungs, because it requires great energy that forms the strength of the heart and lungs. With the increased work capacity of these organs, it minimizes the risk of heart attack and stroke; optimizing oxygen supply and blood circulation.

**Increase stamina and endurance:** The benefits of mountain climbing are also very good for maintaining and increasing stamina and endurance so that by frequent climbing, endurance and stamina are maintained and even increase.

**Maintain a healthy body:** Mountain climbing can maintain a healthy body, in addition to the increased working capacity of the heart and lungs, as well as stamina and endurance of the body, climbing mountains can also maintain a healthy body, because the air that is inhaled is still far from poison air pollution.

**Strengthen the leg muscles:** Mountain climbing activities carried out routinely, can strengthen leg muscles, and can also affect bone strength, so as to minimize the risk of osteoporosis.

As a sports media: The benefits of climbing mountains for the body are also one of the activities to exercise, especially for those who are happy with activities in nature. Sports activities include running up and down the mountain.

Get closer to nature: Mountain climbing activities have natural and beautiful environments and ecosystems. So look for peace of nature.

**Providing new experiences:** Climbing provides a new experience, both physical experience and spiritual experience. When climbing a mountain, meet a lot of things that are unexpected, which will certainly add to the experience.

Add relationships with other people: Usually hiking is done not alone. If you do it alone, usually in the middle of the road climbing will meet other climbers while resting.

**Lose weight:** Climbing the mountain for health can be one of the most powerful methods of exercise to lose weight. This is because the calories burned when you do climbing activities are very large.

As a satisfaction from a hobby: Some people consider hiking to be a hobby and purpose in life. So by climbing the various mountains that exist, this is very satisfying to the needs of the hobby and life goals. By achieving satisfaction, the quality of life gets better.

**Increase knowledge:** With hiking, studied know nature, by nature symbols that appears, example windward, direction of the sun, and also symbols of traces of wild animals, etc. With this, knowldge has intensified and you can implementation in real life.

**Learn to live independently:** With hiking, it means we only will count of the provisions, instinct, and also nature conditon for survive, especially when hiking at extreme area. So, benefits of hiking can teach us to learn to live independently and survive without technology.

**Mould a strong, health mental and mind:** Hiking very useful for mould also a strong emphatic character, mental and mind. In hiking needs management skills instinct, and also good emotional management. Most of the time hiking, so instinct management and emotion will honed, and will take effect also to a strong health mental and mind.

**Relaxation and entertainment:** You can also take advantage of climbing as one of the media in seeking relaxation and entertainment. For those of you who are already tired of city life that gives a lot of pressure, then you can get your relaxation and entertainment through hiking.

Those are some of the benefits that you can get from climbing. Keep in mind, before climbing there are many things that must be prepared, including:

- Physical and mental readiness
- Logistics readiness, climbing equipment and supplies
- Friendly weather conditions
- Climbing location that must be in accordance with the abilities of climbers
- Intention and also pray for salvation

#### Conclusion

Based on the results of the research that has been done, it can be concluded that there is an influence of hiking and soaking in the river against stress levels in athletes in preparation for championship with a p-value of 0.0001 < a (0.05), where the stress level before being given hiking and soaking in the river in the experimental group were moderate as much as 66.7% and mild 33.3%, then after being given hiking and soaking in the river became light 40.0% and normal 60.0%. Athletes and clubs are expected to be able to apply and apply hiking and soaking in the river at least once a week to help reduce stress on athletes in preparation for competition or event events.

## REFERENCES

- Claire, T. 2006. Yoga for Men. Penerjemah: RahmaniAstuti.
- GABA Levels: A Randomized Controlled MRS Study, (Online), (http://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3111147) diakses: 18 September 2014).
- Gunawan, Weka. 2006. Keren TanpaNarkoba. Jakarta: Grasindo
- Hartono, dr. LA. 2007. Stres & Stroke. Yogyakarta: Kanisius
- Haryo, C. W. 2010. MendiknasApresiaiTentangUjian Nasional. Jakarta: Jakarta: PenerbitBukuKompas
- Kinantie, O.A, dkk. 2012. Gambaran Tingkat StresSiswa SMAN 3 Bandung Kelas XII MenjelangUjian Nasional 2012. FIK Unpad.
- Komputindo Priyoto. 2014. Konsep Manajemen Stress. Yogyakarta: Nuha Medika Santrock, J.W. 2004. Adolescence Perkembangan Atletalihbahasa Shint o dan Sherly. Jakarta: Erlangga.
- Krogh, T.P., Bartels, E.M., Ellingsen, T., Stengaard Pedersen, K., Buchbinder, R., Fredberg, U., Bliddal, H. and Chrisensen, R. 2013. Comparative effectiveness of injection therapies in lateral epicondylitis: a systematic review and network metanalysis of randomized controlled trials. *The American Journal of Sports Medicine* 41(6), 1435-1446.
- Lebang, E. 2011. Mitos Dan FaktaOlahraga Dan Yoga. Jakarta: Penerbit Buku Kompas Publication.
- Notoadmodjo, S. 2010. MetodologiPenelitianKesehatan. Jakarta: Rineka Cipta
- Pangkalan, I. 2008. Seri Bodytalk: Yoga untukStres. Jakarta: PT Elex Media
- Park, Gi-Young, Kwon, Dong Rak, Cho, Hee Kyung, Park, Jinyoung, Park, Jung Hyun, 2017. "Distribution of Plateletrich Plasma after Ultrasound- Guided Injection for Chronic Elbow Tendinopathies". Jurnal of Sport Science and Medicine, 2017. Vol.16 pp. 1-5.
- Shindu, P. 2014. Panduan Lengkap Yoga: Untuk Hidup Sehat Dan Seimbang. Bandung: Penerbit Qanita.
- Streeter et al. 2010. Effects of Yoga Versus Walking on Mood Anxiety, and Brain Valentini, V & Nisfiannoor, M. 2006. Jurnal Provitae volume 2 No. 1. Jakarta: FP Universitas Tarumanegara
- Wiadayana. 2011. The Power of Yoga for Pregnancy and Post Pregnancy/ GRS. Jakarta: Grasindo
- Widyantoro, 2010. Yoga Yuk, Biar Fit. Jakarta: Raketindo Primedia Mandiri.
- Wirawanda, Y. 2014. KedasyatanTerapi Yoga. Jakarta: Padi Jurnal Ilmiah Kesehatan (JIK) Vol IX, No 2, September 2016 ISSN 1978 – 3167