



***EFFECTIVENESS OF SKYTREX ADVENTURE AS A THERAPEUTIC
AVENUE FOR PHYSICAL ACTIVITIES IN REDUCING
VISITORS' STRESS LEVEL***

THIVYA LAXSHMY RAMAN

FH 2019 81

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VISITORS' STRESS LEVEL**



By
THIVYA LAXSHMY RAMAN

**A Project Report Submitted in Partial Fulfillment of the Requirement for
the Degree of Bachelor of Park and Recreation Science in the
Faculty of Forestry
Universiti Putra Malaysia**

2019

Special dedicated to:

My beloved parents, Raman a/l Appalanaidu and Kalaiarsy a/p Retnam,

My siblings, brothers and sisters

My lecturers and friends

Thank you for your concern, understanding and supporting.



ABSTRACT

The adequacy of nature in decreasing stress through enjoyment exercises is yet to be deductively and thoroughly assessed. In Malaysia, there is still a lack of research on the association between forest and outdoor recreation in relation to stress reduction. The purpose of this study is to measure the effectiveness of outdoor recreation on visitors' stress level at Skytrex Adventure Shah Alam, Selangor, which is situated in the forest of Taman Botani Negara, Shah Alam. This study was conducted through administration and distribution of questionnaire forms to 150 respondents. The respondents were requested to complete the questionnaire before and after undergoing high rope course at Skytrex Adventure, Shah Alam. Prior to that, the respondents, who had agreed to participate in the study, were briefed on the experiment. Generally, the psychometric questionnaire consists of Profile of Mood States (POMS), Positive and Negative Affect Schedule (PANAS), Restoration Outcome Scale (ROS) and Perceived Stress Scale (PSS). These tests were used to identify the psychological effects of outdoor recreation in nature setting. Results indicated that the PANAS evaluation showed a highly significant increase ($p < 0.001$) in the positive attitudes among the respondents after undergoing the high rope course, and a significant reduction ($p < 0.01$) in the scores for negative attitudes. In addition, the POMS test also showed a significant difference ($p < 0.001$) in the Total Mood Disturbance among the respondents after taking part in the high rope course. This finding indicates that the respondents felt more restored and thus showed a reduction in tension and anxiety, depression, anger, as well as confusion moods. However, there is a significant increase ($p < 0.01$) in the respondents' level of fatigue after undergoing the high rope course.

ABSTRAK

Penerimaan alam semula jadi dalam mengurangkan tekanan (stress) dengan melakukan aktiviti rekreasi belum ditaksir secara menyeluruh. Di Malaysia masih kekurangan kajian mengenai kawasan hijau dan aktiviti rekreasi yang berkaitan dengan pengurangan tekanan (stress). Kajian ini meneroka kesan penentuan alam semula jadi dan rekreasi luar berkaitan dengan pengurangan tekanan daripada perspektif psikologi. Tujuan kajian ini adalah untuk mengukur keberkesanan rekreasi luar terhadap tahap tekanan peserta di Skytrex Adventure Shah Alam, yang terletak di Taman Botani Negara Shah Alam. Kajian ini dijalankan dengan menyerahkan borang soal selidik kepada 150 responden. Peserta diminta untuk menjawab soal selidik sebelum dan selepas menjalani aktiviti tali di Skytrex Shah Alam. Sebelum itu, hanya peserta yang bersetuju untuk mengambil bahagian dalam kajian akan diberi taklimat mengenai eksperimen tersebut. Secara amnya, soal selidik psikometrik terdiri daripada penilaian terhadap keadaan Profil Status Mood (POMS), penilaian Jadual Kesan Positif dan Negatif (PANAS), penilaian Skala Hasil Pemulihan (ROS) dan penilaian terhadap Skala Tekanan (PSS). Ujian ini dilakukan untuk mengenalpasti kesan-kesan psikologi rekreasi luar dalam penggunaan tetapan alam semula jadi. Keputusan menunjukkan bahawa penilaian PANAS menunjukkan peningkatan yang signifikan ($p < 0.001$) dalam sikap positif di kalangan peserta selepas menjalani aktiviti tali serta pengurangan signifikan ($p < 0.01$) dalam skor sikap negatif. Di samping itu, ujian POMS juga menunjukkan perbezaan yang signifikan ($p < 0.001$) dalam Gangguan Mood (TMD) di kalangan responden selepas mengambil bahagian dalam aktiviti tali. Kajian ini menunjukkan bahawa responden merasa lebih pulih dan dengan itu menunjukkan pengurangan terhadap ketegangan dan kebimbangan, kemurungan, kemarahan, serta suasana kekeliruan. Walau bagaimanapun, terdapat peningkatan yang signifikan ($p < 0.01$) dalam tahap keletihan responden selepas menjalani aktiviti tali.

ACKNOWLEDGEMENTS

I would like to take this opportunity to express my gratitude and thanks to all people who have helped me in finishing this project. Their support and guidance were helping me in many ways in completing this project. First and foremost, I would like to acknowledge and express my special thanks especially to my supervisor Dr. Nor Akmar Abdul Aziz for her guidance, advice, commitment and constructive comments in accomplishing my research. Also, I would like to express my gratitude to Dr. Evelyn Lim Ai Lin and Prof. Madya Dr. Manohar Mariapan. Thank you for helping and support. Special thanks to Skytrex Adventure Shah Alam and the staff for their permission and cooperation during data collection for this research. Most noteworthy appreciation and most profound grateful to every one of my families and companions whom never surrender for giving me certain inspiration and most grounded supporter, particularly my beloved mother, Kalaiarsy a/p Retnam, my dad, Raman a/l Appalanaidu, and my siblings. Thank you so much for your moral support and positive advice that you all have given and standing along with me through all this semester of my study. Last but not least, I wish to express my sincere gratitude to all those who not mentioned here that helped me to ensure the completion of my research.

Thank you so much.

APPROVAL SHEET

I certify that this research project entitled “**Effectiveness of Skytrex Adventure as a Therapeutic Avenue for Physical Activities in Reducing Visitors’ Stress Level**” by Thivya Laxshmy Raman has been examined and approved as a partial fulfillment of the requirements for the Degree of Bachelor of Park and Recreation Science in the Faculty of Forestry, Universiti Putra Malaysia.

Dr. Nor Akmar Abdul Aziz
Faculty of Forestry
Universiti Putra Malaysia
(Supervisor)

Prof. Dr. Mohamed Zakaria bin Hussin
Dean
Faculty of Forestry
Universiti Putra Malaysia

Date: June 2019

TABLE OF CONTENTS

	Page
DEDICATION	i
ABSTRACT	ii
ABSTRAK	iii
AKNOWLEDGEMENTS	iv
APPROVAL SHEET	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
CHAPTER	
1 INTRODUCTION	1
1.1 General Background	1
1.2 Problem Statement	3
1.3 Objectives of Study	4
2 LITERATURE REVIEW	5
2.1 Recreation	5
2.1.1 Therapeutic Recreation	6
2.1.2 The Concept of Therapeutic Recreation	7
2.2 Stress	9
2.2.1 Symptom of Stress	12
2.2.2 Psychological Aspect of Stress	14
2.3 Relationship of Therapeutic Recreation and Stress	15
3 METHODOLOGY	20
3.1 Study Area	20
3.2 Data Collection	21
3.2.1 Sample Size	21
3.2.2 Sampling Technique	23
3.3 Questionnaire Design	23
3.4 Data Analysis	25
3.4.1 A Paired T-test	25
3.4.2 Analysis of Variance (ANOVA)	25
3.4.3 Descriptive Statistical Analysis	26
4 RESULT AND DISCUSSION	27
4.1 Introduction	27
4.2 Socio Demographic Profile of Participants	27
4.3 Psychological Indices	31
4.3.1 Restoration Outcome Scale	31
4.3.2 Profile of Mood States	32
4.3.3 Positive and Negative Affect Schedule	34
4.3.4 Perceived Stress Scale	38
4.4 Summary of Findings	40

5	CONCLUSION AND RECOMMENDATION	43
5.1	Conclusion	43
5.2	Recommendation	44
5.3	Limitation of Study	45
	REFERENCES	47
	APPENDIX	52



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LIST OF TABLES

Table		Page
2.1	Psychological Symptoms of Stress	15
4.1	Participants' Gender	28
4.2	Participants' Age	28
4.3	Participants' Marital Status	29
4.4	Participants' Religion and Race	29
4.5	Participants' Education	30
4.6	Participants' Occupation	31
4.7	Descriptive of ROS Statements and p -value After Participating Outdoor Activity	32
4.8	Descriptive of Perceived Stress Scale Statements and the p -value Outcomes	39

LIST OF FIGURES

Figure		Page
2.1	A Stimulus-based Model of Stress	12
2.2	A Response-based Model of Stress	14
3.1	The location of Skytrex Adventure Shah Alam	21
3.2	Flow Chart of Study Design	24
4.1	Comparison between the Mean Value of the Profile Mood States Subscales at Before and After Participating High Rope Course at Skytrex Shah Alam	33
4.2	Mean Value Comparison of Positive Subscales at Two Measurement Period in High Rope Activity at Skytrex Shah Alam	35
4.3	Mean Value Comparison of Negative Subscales at two Measurement Periods in High Rope Activity at Skytrex Shah Alam	36
4.4	Comparison Mean Values between Positive and Negative Affect Scores in both Periods After Participating High Rope Activity at Skytrex Shah Alam	37

LIST OF ABBREVIATIONS

GAS	General Adaption Syndrome Theory
PANAS	Positive and Negative Affect Schedule
POMS	Profile of Mood States
ROS	Restoration Outcome Scale
PSS	Perceived Stress Scale
TMD	Total Mood Disturbance



CHAPTER ONE

INTRODUCTION

1.1 General Background

The life in 21st century shows the indication of complexity than the years it has been. Sensational issue in our country is regarding on lifestyle, working and study environment contributed to unhealthy lifestyle not only among Malaysians but in the world. According to The Patron of the Malaysian Psychiatric Association (MPA), Lee Lam Thye, about 29% of Malaysian had mental depression and anxiety in 2017 and expected to be increased in 2020 (Thye, 2018). Around 75% of the people in United States reported that they have been suffering high stress past few months, whereby 50% of them stated that there is increase in their stress in the year 2017 (Association, American Psychological, 2017).

Besides that, those people who are living in urbanized area such as Kuala Lumpur tend to undergo high stress. This is because, they had to face traffic jams, high living expenses and pressure from working environment. According to Ang Kim Teng, a secretary general to Malaysian Mental Health Association (MMHA), number of population came to Kuala Lumpur for the purpose of job and also studies. Some of them have to live independently without having family support through mentally or emotionally (Chew, Vos, Stellato, Ismail, & Rutten, 2018).

A study by Fink (2010) found that stress has a dissimilar sense of dissimilar people under dissimilar settings. There are number of studies showed that visiting nature area can reduce stress and increase physiological wellbeing by (Sallis et al., 2016; Hansmann, Hug & Seeland, 2007; Pretty, Peacock, Sellens, & Griffin 2005). Furthermore, studies have also shown that physical activity can have long-term benefits for stress in a natural environment (Takayama et al., 2014). These studies have found that nature can minimize the potential long-term harmful effects of chronic stress and interfere with the stress potential to cause anxiety.

In addition, there is evidence that the people tend to engage in physical activity in green areas and can be active in natural areas for longer and at greater levels of intensity (Joseph & Maddock, 2016). For example, activities that could well be supported by outdoor environments such as running, climbing, rock climbing or horseback riding are those that could be carried out for longer periods compared to indoor activities. (Pretty, et al., 2007). Other study results in trained athletes have shown that they can exercise in natural environments at higher intensities because they are more preoccupied from inner signs of fatigue (Pennebaker & Lightner, 1980) or have less effort perceived (Harte & Eifert, 1995; Ceci & Hassmen, 1991). These two effects can interact, resulting in more active people than in other settings, resulting in higher health benefits (Gladwell, Brown, Wood, Sandercock, & Barton, 2013).

1.2 Problem Statement

In this era of globalization stress is frequently experienced by various classes of people. Being unhappy in job, working long hours, having a heavy workload, facing a dense traffic every day, money problem, family issue, study difficulty and jobless are among causes of stress. A research conducted in Malaysia by Gan and Yeoh (2017) and Al-Ani, Radeef and Ghazi (2015) discovered that the commonness of moderate to great degree serious dimension of melancholy, uneasiness and worry among college undergraduates was extending from 13.9% to 29.3%, 51.5% to 55.0% and 12.9% to 21.6%, individually. In the other hand, sort of work additionally added to pressure Makhbul and Idrus (2009). With this high stress it may lead to depression and suicide.

The adequacy of nature in decreasing stress by doing leisure exercises yet to be deductively assessed far and wide (Sallis et al., 2016; Van Dyck et al., 2014; de Vries, Van Dillen, Groenewegen, & Spreeuwenberg, 2013; Maas, Dillen, Verheij, & Groenewegen, 2009). In Malaysia there are still lacking a research on the associated of green space and outdoor recreation can reduce people stress (Nath, Han, & Lechner, 2018). There are many natural areas offering recreational activities such as white water rafting, hiking, high rope, and more. In order to substantiate, an evaluation on the effectiveness of Skytrex Adventure as a therapeutic avenue for physical activities in reducing visitor's stress level will be conducted. Since, this place known for

conducting outdoor activities in a nature based area. Futhermore, Skytrex Adventure Shah Alam arises as a way to add health benefits of green exercise. This place is simply having better access to natural environments that provides the space and facilities for physical activity, which may in turn foster a more active lifestyle. Moreover, Skytrex Adventure Shah Alam provides the evidence of having good access to natural environments that can promote physical activity is equivocal.

1.3 Objectives of Study

The purpose of this study is to measure the effectiveness of Skytrex Adventure as a therapeutic avenue for physical activities in reducing visitors' stress level. The specific objectives of this study are;

- a. To investigate the level of visitors' stress before undergoing recreational activities (Pre-test)
- b. To evaluate the level of visitors' stress after undergoing recreational activities (Post-test)

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