

A COMPARATIVE STUDY OF LEADERSHIP COMPENTENCY GAINS THROUGH OUTDOOR RECREATION BETWEEN UNIVERSITY STUDENTS

*Mohamad Nadzlee bin Alim¹, Zaharul Azwan bin Abdul Razak² & Fiqrul Izzat bin Faidrul Iqmar³

¹Faculty of Education, UiTM Selangor
Mohamad Nadzlee bin Alim
mohamadnadzlee24@gmail.com

² Faculty of Education, UiTM Selangor
Zaharul Azwan bin Abdul Razak
zaharulazwan@uitm.edu.my

³Faculty of Education, UiTM Selangor
Fiqrul Izzat bin Faidrul Iqmar
fiqrul.izzat@gmail.com

*Corresponding author's email: mohamadnadzlee@gmail.com

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ABSTRACT

Outdoor recreation can be used in the development of leadership, but there is not much research in the Malaysian universities. This research was conducted to determine their effectiveness on the members of TRAINER Club in UiTM Puncak Alam. The Leadership Practices Inventory and Leadership Trait Questionnaire were administered in a quantitative survey of 175 respondents. The findings indicated friendliness ($M=3.99$, $SD=1.142$), persistence ($M=3.93$, $SD=1.072$) and dependability ($M=3.90$, $SD=1.097$) to be the strongest traits, and outgoingness to be the weakest trait ($M=2.98$, $SD=1.066$). The significant correlations were made by motivating others to share a vision ($r=0.603$, $p=0.000$) and enabling other people to take initiative ($r=0.518$, $p=0.004$). The researchers conclude that outdoor learning using experience is beneficial to leadership skills, but reflective plans are needed to encourage balanced development.

Keywords: *Outdoor recreational activities, Leadership traits, Leadership practices, Experiential learning, Higher education*

1.0 INTRODUCTION

Outdoor recreational activities have always been viewed as a catalyst for the development of personal growth and critically demanded leadership skills such as decision-making, teamwork, resilience and flexibility. Outdoor recreational activities in the institution, including those which are delivered by the TRAINER Club at UiTM Puncak Alam structure-through a curriculum, hands-on experiences for the students, such as orienteering, hiking, camping and cooperative team tasks. By undertaking such ventures students develop successful leadership qualities for their educational and future professional success. Studies in international research show the connection between outdoor recreational experiences and leadership improvement, but the focus has been majorly on foreigners while relatively less focus has been given to Malaysian university students. This study seeks to fill the gap by exploring the effects of the outdoor recreational activities within the TRAINER Club on the emergence of critical leadership qualities amongst the students and insights into the role of structured outdoor recreation in developing leadership within the university world setting.

2.0 LITERATURE REVIEW

The literature review critically examines the past and current studies on outdoor recreational activities and their role in developing student leadership. It focuses on both global and local viewpoints to emphasize evidence that outdoor recreation programs can contribute greatly to leadership qualities such as teamwork, resilience, and emotional intelligence (Brown and Jones, 2021; Martin et al., 2017). Nevertheless, it points to a gap in the research of higher education in Malaysia, particularly in the area of structured programs such as the TRAINER Club at UiTM Puncak Alam. The review provides a critical interaction with the Experiential Learning Theory (ELT) by Kolb, which proves its importance in experiential learning in leadership through experience, reflection, and application cycles. A conceptual framework also combines problem-solving, communication, and adaptability as the main outcomes of leadership developed through outdoor recreational activities. This part shows a solid theoretical base and clear synthesis of pertinent literature, placing the study to explore the effects of an outdoor recreation learning environment on the development of leadership competency in Malaysian university students.

3.0 METHODOLOGY

Research Design

In this research, it will use quantitative approach and achieve the objective, the effect of outdoor recreational activities on leadership development among TRAINER Club members at UiTM Puncak Alam will be evaluated. The research employs a descriptive and correlational approach to research dimensions such as decision-making, teamwork, and adaptability. Standardized questionnaires are obtained for analysis purposes to get consistent answers. Using this approach, one gets unique and verifiable information of how practical leadership experience in the outside environment prepares the students for the lead, which supports its importance in developing the University level leadership.

Population & Sampling

This research focuses on individuals who used to and currently participate in outdoor recreational activities in the UiTM Puncak Alam TRAINER Club. In this research, purposive random sampling was employed to respondents from club members of TRAINER who are more active in outdoor recreation since participants were directly and relevantly involved in the research process to give accurate and meaningful information on the outcomes of leadership development. The sampling is based on a method by Krejcie and Morgan that is sampling of 175 students from a population of 320.

Research Instruments

This research will employ the use of structured questionnaires to help determine the effect of outdoor recreational activities on the members of TRAINER Club of UiTM Puncak Alam in leadership development. The sections included in the questionnaire are demographics, outdoor recreational activities, leadership traits, and leadership practices. The collected data will determine the relationship between outdoor recreational activities and the development of leadership skills.

Data Collection Procedures

The methods used to collect data include the use of structured questionnaires conducted on 175 participants of the TRAINER Club at UiTM Puncak Alam. The questionnaire will be administered to obtain details on demographics, participation in outdoor recreational activities, and leadership traits and practices. The results will help determine the relationship when it comes to the association of outdoor recreation and leadership development.

Ethical Consideration

The research respects ethical principles by obtaining the informed consent of all the participants and allowing them to withdraw at any time without any consequences. Privacy of the participants shall be protected, and the data will be provided only in the aggregated form. The study involves the use of ethical guidelines that have been approved by the ethics committee in the university.

Data Analysis

Analysis of the data section comprises descriptive and inferential analysis. Descriptive analysis will record a summary of the demographic details as well as outdoor recreational activities participation by participants. Inferential analysis will utilize Pearson Correlation to determine relationships among the traits of leadership and participation in outdoor recreational activities

4.0 RESULTS AND DISCUSSION

The research offers a thorough various demographics from the respondents. The inferential analysis that being used for analyzing the data is descriptive analysis and pearson correlation analysis to help answer the research questions.

Table 1: Descriptive Analysis on Demographic of Respondents

No.	Demographic	Frequency	Percentage (%)
Gender			
1	Male	73	41.7
	Female	102	58.3
Age (year)			
2	21 years old-23 years old	63	36.0
	24 years old-26 years old	57	32.6
	27 years old-30 years old	55	31.4
Semester			
3	Semester 1	16	9.1
	Semester 2	19	10.9
	Semester 3	31	17.7

	Semester 4	20	11.4
	Semester 5	27	15.4
	Semester 6	22	12.6
	Semester 7	16	9.1
	Semester 8	24	13.7
	Faculty		
4	Faculty of Accountancy	30	17.1
	Faculty of Pharmacy	29	16.6
	Faculty of Business and Management	32	18.3
	Faculty of Health Science	20	11.4
	Faculty of Education	33	18.9
	Faculty of Hotel and Tourism Management	31	17.7
5	Have you participated in outdoor recreational activities before?		
	Yes	175	175.0
	No	0	0.0
	Are you a member of TRAINER club?		
6	Yes	100	100.0
	No	0	0.0

Table I provides the information on 175 participants' demographics. It demonstrates that the majority (58.3%) of the participants are female and most of the participants are in the age bracket of 21-23 (56.3%). The sample has been taken from students of different semesters, and the largest number comes from Semester 3 (17.7%). Most of the participants come from the Faculty of Education, and they are all in the TRAINER Club.

Table II: Descriptive Analysis On Participation In Outdoor Recreational Activities

No.	Outdoor recreational activities	Frequency	Percentage (%)
1	Day Hiking	25	14.3
2	Kayaking	27	15.4
3	Swimming	27	15.4
4	Orienteering	39	22.3
5	Zipline	33	18.9
6	Abseiling	24	13.7

In Table II, it's show that outdoor recreational activities that participants are interested in. Orienteering was the most frequent activity (22.3%) that participated, followed by zipline (18.9%), kayaking and swimming (15.4 % each), day hiking (14.3%) and abseiling (13.7%). This presents the students' interest in nature-based activities as well as physically engaging outdoor recreational activities

Table III: Descriptive Analysis On Leadership Trait

No.	Leadership Trait	Mean	Std. Deviation
1	I treat others with kindness, respect, and warmth. (Friendly)	3.99	1.142

2	I remain committed to my goals despite difficulties or distractions (<i>Persistent</i>).	3.93	1.072
3	I consistently fulfil responsibilities and can be relied upon by others. (<i>Dependable</i>)	3.90	1.097

Table III shows the mean and standard deviation for leadership traits. The highest leadership traits are “Friendly” (M=3.99, Std=1.142), “Persistent” (M=3.93, Std=1.072) and “Dependable” (M=3.90, Std=1.097).

Table IV: Correlation Analysis On Leadership Practice

No.	Leadership Practice	r value	p value
1	Inspired a Shared Vision	0.603	0.000
2	Enable Others to Act	0.518	0.004

*Significant $p < 0.05$

Table IV shows a significant positive correlation for Inspired a Shared Vision ($r=0.603$, $p=0.000$) exists between the outdoor recreational activity participation and the leadership practice meanwhile Enable Others to Act ($r=0.518$, $p=0.004$) indicates a very strong positive correlation between the leadership practice and the participation in outdoor recreational activity.

Discussion

It is found that TRAINER Club members developed traits of leadership in the outdoor recreational activities mostly in terms of Friendly (M=3.99, Std=1.142), Persistence (M=3.93, Std=1.072) and Dependable (M=3.90, Std=1.097). Such qualities are consistent with social and emotional leadership into which outdoor recreational activities are reinforced by challenges based on teams. Moreover, the research revealed very high positive correlations between participation in outdoor recreational activities and leadership practices especially in “Inspire a Shared Vision” ($r=0.603$, $p=0.000$) and “Enable Others to Act” ($r=0.518$, $p=0.004$). Such findings indicate that outdoor recreational activities are effective in developing such leadership qualities as vision-building and empowerment amongst student participants.

5.0 CONCLUSION

It can be concluded that outdoor recreational activities have the great impact on the improvement of leadership competencies by the members of TRAINER club in UiTM Puncak Alam. The research may need to incorporate experiential outdoor recreation programs into academic curriculum for well-balanced leadership skills and suggests longer-term leadership development and focus in type of outdoor recreational activities studies.

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AUTHORS CONTRIBUTIONS

Mohamad Nadzlee bin Alim is the author and main researcher of this research, Zaharul Azwan bin Abdul Razak contributes as a supervisor and corresponding author. Fiqrul Izzat was contributes in conducting the analysis in this research.

REFERENCES

- Brown, M., & Jones, M. (2021). Adventure and Risk in Outdoor Environmental Education. *International Explorations in Outdoor and Environmental Education*, 89–99. https://doi.org/10.1007/978-3-030-75980-3_8
- Ewert, A. W., & Sibthorp, J. (2014). Outdoor Adventure Education. In *Human Kinetics eBooks*. Human Kinetics. <https://doi.org/10.5040/9781492595663>
- Ewert, A., & Overholt, J. (2010). Fostering Leadership through a Three-Week Experience: Does Outdoor Education Make a Difference? *Research in Outdoor Education*, 10(1), 38–47. <https://doi.org/10.1353/roe.2010.0005>
- Hayashi, A. (2006). *LEADERSHIP DEVELOPMENT THROUGH AN OUTDOOR LEADERSHIP PROGRAM FOCUSING ON EMOTIONAL INTELLIGENCE*. <https://scholarworks.iu.edu/iuswrrest/api/core/bitstreams/738b4d0d-1dbc-43d0-85df-b50c0ead9b76/content>
- Inderscience Publishers - linking academia, business and industry through research. (2023). Inderscience.com. <https://www.inderscience.com/offers.php?id=130698>
- KENPRO. (2012, August 25). Sample Size Determination Using Krejcie and Morgan Table - KENPRO. KENPRO. <https://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>
- Kolb's Learning Styles & Experiential Learning Cycle. (2024, February 2). Simply Psychology. <https://www.simplypsychology.org/learning-kolb.html>
- Kourtesopoulou, A., & Kriemadis, A. (2023). Leadership development of university students through outdoor training: a systematic literature review. *International Journal of Sport Management and Marketing*, 23(3), 229. <https://doi.org/10.1504/ijsmm.2023.130698>
- Leadership Practices Inventory LPI Assessment Test*. (2022, October 9). Leadership Personality Tests & Assessments. <https://leadership360s.com/leadership-practices-inventory-lpi-self/>
- Leadership Trait Questionnaire (LTQ)*. (n.d.). https://www.bethlehemofalexandria.org/wp-content/uploads/2018/02/leadership_trait_questionnaire.pdf
- Martin, B., Breunig, M., Wagstaff, M., & Goldenberg, M. (2017). *Outdoor Leadership*. Human Kinetics. https://www.researchgate.net/publication/281035767_Outdoor_leadership_Theory_and_practice
- Martin, B., Breunig, M., Wagstaff, M., & Goldenberg, M. (2024). *Outdoor Leadership*. Human Kinetics. https://www.researchgate.net/publication/281035767_Outdoor_leadership_Theory_and_practice
- McLaughlin, C. P., & Kunk-Czaplicki, J. A. (2020). Leadership: Theory and Practice by Peter G. Northouse. *Journal of College Student Development*, 61(2), 260–261. <https://doi.org/10.1353/csd.2020.0023>
- Northouse, P. G. (2021). *Leadership Theory and Practice Ninth Edition*. SAGE Publications, Inc. - References - Scientific Research Publishing. (2021). Scirp.org. <https://www.scirp.org/reference/referencespapers?referenceid=3786973>
- Petriglieri, Gianpiero, and Jack D. Wood. "[Beyond 'Fun and Games': Outdoor Activities for Meaningful Leadership Development](#)." In *Mastering Executive Education: How to Combine Content with Context and Emotion*, edited by Paul J. Strebel and Tracy Keys, 252–266. London: Financial Times Prentice Hall, 2005.
- Priest, & Gass, M. (2005, January 6). *Effective Leadership in Adventure Programming*. ResearchGate; Human kinetics. https://www.researchgate.net/publication/233843756_Effective_Leadership_in_Adventure_Programming

- Priest, & Gass, M. (2005, January 6). *Effective Leadership in Adventure Programming*. ResearchGate; Human kinetics.
https://www.researchgate.net/publication/233843756_Effective_Leadership_in_Adventure_Programming
- Priest, S., & Gass, M. A. (2017). *Effective Leadership in Adventure Programming*. (2014).ResearchGate.https://www.researchgate.net/publication/233843756_Effective_Leadership_in_Adventure_Programming
- Sibthorp, J., Furman, N., & Paisley, K. (2008). *Long-term impacts attributed to participation in wilderness education: Preliminary findings from NOLS*. (2024). Googleusercontent.com.[https://scholar.googleusercontent.com/scholar?q=cache:z6Y7kqqGtXkJ:scholar.google.com/+Sibthorp,+J.,+Furman,+N.,+%26+Paisley,+K.+\(2008\).&hl=en&as_sdt=0,5&as_vis=1](https://scholar.googleusercontent.com/scholar?q=cache:z6Y7kqqGtXkJ:scholar.google.com/+Sibthorp,+J.,+Furman,+N.,+%26+Paisley,+K.+(2008).&hl=en&as_sdt=0,5&as_vis=1)