

The Effectiveness of Outdoor Recreation Programs in Fostering Interpersonal Communication Skills and Group Cohesiveness

Muhammad Irfan Azhari¹, Mohd Khairulanwar Md Yusof^{2*},
Ellail Ain Mohd Aznan³, Siti Amalina Mohd Yazid⁴

^{1,2,3,4}Faculty of Sports Science and Recreation, Universiti Teknologi MARA, Perlis Branch,
Arau Campus, 02600 Arau, Perlis, Malaysia

Authors' Email Address: ¹irfanazhari0104@gmail.com, ^{2*}m_khairulanwar@uitm.edu.my,
³ellailain@uitm.edu.my, ⁴amalina2311@uitm.edu.my

Received Date: 8 November 2024

Accepted Date: 24 December 2024

Revised Date: 8 January 2025

Published Date: 31 January 2025

*Corresponding Author

ABSTRACT

Outdoor recreation programs are designed to promote leisure and physical activity while fostering stronger social connections among people. People often face various difficulties in communication due to a combination of environmental factors. Some common challenges and difficulties among students in their communication include measurement and conceptualization of group effectiveness. Therefore, the study aims to examine the effectiveness of outdoor recreation programs towards interpersonal communication skills and group cohesiveness among Universiti Teknologi MARA Campus Seremban. The research instrument used was the Interpersonal Communication Scale (ICS) and the Group Environment Questionnaire (GEQ). A total of 118 students who take part in outdoor recreation programs were chosen as participants consisting of 59 males and 59 females. For interpersonal communication, the highest mean score was 'External Perception' ($M = 4.92$) and for group cohesion, the highest mean score was 'Group Integration Task' ($M = 5.59$). The results indicate that there were no significant differences spotted in interpersonal communication and group cohesion that influence participants when participating in outdoor recreation programs between genders among respondents. This study indicates that such programs are equally beneficial for both male and female students in improving their ability to communicate and interact with others. This insight can be used to promote gender-neutral approaches in designing and implementing these programs, ensuring equal opportunities for all participants. This study can provide the FSR UiTM Seremban with general information on the effectiveness of outdoor recreation programs for their students.

Keywords: group cohesion, gender, interpersonal communication, outdoor recreation programs

INTRODUCTION

Outdoor recreational activities, which include pursuits such as kayaking, hiking, and orienteering, are integral to individuals' leisure time and offer numerous benefits including physical health, mental well-being, and environmental appreciation (Radzi et al., 2017; West et al., 2018). These activities foster social values and provide positive recreation experiences, enhancing personal

development and team-building skills (Maehr et al., 2011). In contrast to the United States, where outdoor recreation is a priority in student orientation programs, Malaysia lags in integrating such activities at the university level, suggesting a potential gap in educational approaches (Radzi, 2017; Andre, 2017).

Effective communication and group cohesion are critical skills developed through outdoor recreation programs, as they involve teamwork and collaborative efforts (Bin et al., 2014; Boies et al., 2015). These programs provide practical platforms for enhancing interpersonal communication, which is essential for various aspects of life, including education and work (Eys et al., 2015). Group cohesion, characterized by a strong sense of unity and commitment, is crucial for achieving collective goals and improving overall group performance (Yasim, 2016; Ha & Ha, 2015). This research focuses on evaluating the impact of outdoor recreation programs on the interpersonal communication skills and group cohesiveness of FSR students at UiTM Seremban.

The current job market demands graduates with robust soft skills, particularly communication abilities, as technological advancements have reduced the reliance on traditional qualifications (Bin et al., 2014; Succi et al., 2020). Challenges in communication, exacerbated by the prevalence of digital interactions, highlight the need for effective interpersonal communication training in education (Ebadi et al., 2015). Gender differences also play a role in communication styles and group cohesion during outdoor activities, with women and men exhibiting varying expectations and engagement approaches (Kim et al., 2009; Burton, 2014; Eys et al., 2015). Despite these complexities, outdoor recreation programs have shown promise in enhancing social support, reducing anxiety, and developing social skills, making them valuable for student development (Andre et al., 2017; Godtman Kling, 2020; Austin et al., 2009; Clark et al., 2011). This study aims to assess the effectiveness of these programs in improving communication and cohesion among UiTM Seremban FSR students.

LITERATURE REVIEW

Outdoor Recreation Program

Outdoor recreation programs are essential for fostering self-confidence, positive thinking, and perfectionism while providing participants with valuable experiences that enhance academic achievement, work commitment, and critical thinking (Radzi et al., 2017; Mohd et al., 2017). These programs, which are inclusive and cater to individuals of all ages and backgrounds, offer a unique opportunity for students to engage in outdoor education, gaining recreational experiences and skills in natural environments (Wafiqah et al., 2022; Andre et al., 2017). Additionally, outdoor recreation positively impacts mental and physical health, prosocial connections, and pro-environmental attitudes, contributing to overall personal development.

Outdoor participation between genders

Gender differences in outdoor participation are influenced by cultural, geographical, and social factors, with traditional stereotypes evolving. Historically, activities like hunting and fishing were seen as masculine, while hiking and gardening were considered feminine. However, as society progresses, more individuals of all genders are engaging in a variety of outdoor activities. Despite this progress, gender role socialization and stereotypes persist, often limiting women's participation in more physically demanding outdoor pursuits and leadership roles (Warren, 2018; Overholt & Ewert, 2015). Women's involvement in outdoor activities, while increasing, remains constrained by societal expectations and the perception of outdoor spaces as predominantly male domains (Godtman Kling et al., 2020).

Interpersonal Communication

Interpersonal communication, a subset of communication involving the exchange of thoughts, messages, and information through spoken and nonverbal symbols, plays a crucial role in daily interactions across various contexts such as work, school, and public places (Selvaag et al., 2022; Bin et al., 2014). It is characterized by four fundamental principles: it is unavoidable, irreversible, complicated, and contextual, reflecting the complexity and significance of these exchanges. The inescapable nature of interpersonal communication means that individuals are constantly sharing information, while its irreversible quality underscores the importance of careful communication, as messages cannot be undone once conveyed (Kumar Singh et al., 2014; Atas Akdemir, 2016). Additionally, interpersonal communication is shaped by psychological, relational, circumstantial, environmental, and cultural contexts, which influence the meaning and progression of interactions between individuals (Bin et al., 2014; Atas Akdemir, 2016).

Outdoor Recreation Program towards Interpersonal Communication

Outdoor recreation programs offer a dynamic environment that fosters interpersonal communication by encouraging participants to engage in group activities and shared experiences, leading to increased social support and enhanced communication skills (Andre et al., 2017; Zachor et al., 2017). Participation in these programs promotes the development of social communication skills, problem-solving, leadership, and team cohesion, as groups navigate through tasks, build trust, and strengthen their relationships (Cooley et al., 2015). Additionally, these programs may require a blend of education and innovative communication strategies to ensure broad accessibility and effective outreach (Beery et al., 2021).

Group Cohesion

Cohesion, initially defined as "the total field of forces which act on members to keep them working in the group" (Festinger, Schachter, & Back, 1950, as cited in Onağ et al., 2014), is often equated with collaboration, team unity, and camaraderie, particularly in sports contexts (Yasim, 2016). The conceptual model of team cohesion by Carron et al. (1985) distinguishes between individual and group interests, as well as task and social aspects, and is measured using the Group Environment Questionnaire (GEQ), which assesses four indicators of cohesion in sports teams (Onağ et al., 2014). Research highlights that higher cohesion correlates with greater athlete satisfaction and is linked to collective efficacy, role involvement, leadership, and communication, though it remains a dynamic and evolving characteristic throughout the life of a team (Yasim, 2016; Onağ et al., 2014).

Outdoor Recreation Program Towards Group Cohesion

Promoting group cohesion is essential for the success of outdoor recreation programs, as it enhances teamwork, communication, and group dynamics, leading to a more enriching experience for participants and fostering lasting connections. Group cohesion in outdoor settings is linked to beneficial physical activity outcomes, such as intervention adherence, increased physical activity, and improved cardiorespiratory fitness (Izumi et al., 2015). Additionally, outdoor education, which aims to improve environmental attitudes and foster human-nature relationships, can also enhance group cohesion by encouraging participation, confidence, motivation, and team spirit, though research shows mixed results on the influence of task and social variables on cohesion (Yasim, 2016; Cooley et al., 2015).

METHODOLOGY

Research Design

The research design for this study was quantitative and non-experimental and involved collecting and analyzing numerical data and using Google Forms as instruments. Additionally, this study aims to examine the effectiveness of outdoor recreation programs towards interpersonal communication skills and group cohesiveness among UiTM Seremban FSR students. This study already obtained ethics approval from the ethical committee.

Research Population and Sampling

In this study, the researcher employed non-probability sampling, often known as purposive sampling. The technique of purposive sampling is used to determine the sample from the population. The total population of the FSR students at UiTM Seremban is 120. According to Krejcie and Morgan (1970), the sample size for the total population is 97 but an additional 30% is recommended to account for potential non-response or drop-outs, resulting in a sample size of 118 for this study.

Research Instrument

The questionnaire items were divided into three sections. Section A pertained to demographic profile data consisting of respondent gender, age, educational level, program, semester and experience in outdoor activity. Section B focused on the Interpersonal Communication Scale. Interpersonal Communication Scale (ICS) was sourced from a previous researcher by Weaver II, R. L., (1993). External Perception and Internal Disseverance are the two components of the Interpersonal Communication Scale which consists of a seven-item questionnaire designed as a result of reliability and validity tests to study people's interpersonal communication preferences.

The reliability of Cronbach's Alpha showed the (ICS Scale $\alpha = .856$) and both sub-scales (External Perception $\alpha = .785$, and Internal Disseverance $\alpha = .743$). Section C focused on the Group Environment Questionnaire (GEQ) sourced by Carron et al., (1985). The questionnaire consists of eighteen items that measure the four dimensions of group cohesion which are Group Integration-Social (GI-S; how the team functions at a social level), Group Integration-Task (GI-T; how the team functions to achieve important team goals), Individual Attraction to the Group-Social (ATG-S; the extent to which athletes are attracted to the team by its social environment), and Individual Attraction to the Group- Task (ATG-T; the extent to which athletes are attracted to the team to achieve important goals). The reliability of the four subscales of cohesion are contained in the GEQ, these include: (ATG-T) (Internal consistency, $\alpha = 0.75$), (ATG-S) (Internal consistency, $\alpha = 0.64$), (GI-T) (Internal consistency, $\alpha = 0.70$), and (GI-S) (Internal consistency, $\alpha = 0.76$).

RESULTS AND DISCUSSION

Tables 1, 2 and 3 present the percentage of gender, respondent's program and experience in outdoor activity.

Table 1: Percentage of Gender for Total Respondents

Demographic Variable		Frequency (N)	Percentage of sample (%)
Gender	Female	59	50
	Male	59	50
	Total	118	100.0

Table 1 shows the gender frequency and percentage of the respondents. The total 118 respondents are made up of 50.0% male and 50.0% female. This shows that both genders are likely to participate in the outdoor recreation program.

Table 2: Percentage of Respondent's Program

Demographic Variable		Frequency (N)	Percentage of sample (%)
Program	SR111	31	26.3
	SR113	38	32.2
	SR241	49	41.5
	Total	118	100.0

Table 2 illustrates the descriptive statistics of the respondent's program. The majority of the respondents were from SR241 (41.5%), followed by SR113 (32.2) and lastly, SR111 (26.3%).

Table 3: Percentage of Experience in Outdoor Activity

Demographic Variable		Frequency (N)	Percentage of sample (%)
Experience in Outdoor	Active	85	72
	Moderate	33	28
	Total	118	100.0

Table 3 reveals the frequency of experience in outdoor activity. The highest total response is active in outdoor activity, which is 72%, followed by moderately participating in outdoor activity which is 31.0%.

Tables 4 and 5 present the results of the Descriptive Statistics of Interpersonal Communication Factors and Group Cohesion factors when participating in the Outdoor Recreation Program among FSR Students, UiTM Seremban

Table 4: Result of Interpersonal Communication Factors When Participated in Outdoor Recreation Program

Interpersonal Communication Factor	Mean*	Std. Deviation	Min	Max
External Perception	4.92	0.81826	2.50	6.00
Internal Disseverance	4.81	0.82497	3.00	7.00

Based on the result, the highest mean in interpersonal communication factor was "External Perception" (M = 4.92). Most of the participants who participated in outdoor recreation programs were able to foster their interpersonal communication proved by the highest mean from the study, which is External perception. According to Jared M. Campbell (2016), External perception, which implies an individual ability to interact with others, predicts an individual's perception ability, gender, and ability to communicate with others.

Table 5: Result of Group Cohesion Factors When Participated in Outdoor Recreation Program

Interpersonal Communication Factor	Mean*	Std. Deviation	Minimum	Maximum
Group Integration Social	4.45	0.55369	2.50	6.75
Group Integration Task	5.59	0.48550	3.80	6.80
Individual Attraction to the Group Social	4.29	0.52405	3.00	5.60
Individual Attraction to the Group Task	3.26	0.92013	1.25	7.25

Based on the result the highest mean score was ‘Group Integration Task’ (M =5.59) Group Integration Task is an action of participants during programs on how they work as a team to achieve important team goals. Outdoor recreation programs often involve structured activities that require participants to collaborate and achieve specific tasks.

The purpose of these task-oriented activities is to promote group cohesion in a task-related setting by encouraging cooperation and collective problem-solving (Eys et al., 2009). Clear responsibilities and interdependence among group members are frequently necessary for the successful performance of group tasks.

Tables 6 and 7 present the results of the differentiation of interpersonal communication and group cohesion when participating in outdoor recreation programs between genders within the FSR students.

Table 6: Result of Differentiate of Interpersonal Communication when participate in Outdoor Recreation Program between gender among FSR Student, UiTM Seremban

t-test for Equality of Means						
	Group	N	Mean	t	df	P value
Interpersonal Communication	Male	59	4.83	-0.42	116	.675
	Female	59	4.89			

Based on the result of the Independent Sample T-Test in Table 6, there were no significant differences between gender on interpersonal communication that influenced participants when participate in outdoor recreation program among FSR Student, UiTM Seremban for the “Interpersonal Communication”, $t(116) = -0.42$, $p = 0.675$ (Male: $M = 4.83$, Female: $M = 4.89$). External perception and internal disservice in communication are influenced by inclusive settings that foster equitable participation across genders. In such settings, both male and female students demonstrate similar improvements in communication skills through collaborative activities that emphasize teamwork and shared objectives. These activities are designed to ensure equal input from all participants, which helps diminish gender differences in communication patterns. As noted by Pattiasina et al. (2024), and De Vries et al. (2003), structured group activities that promote inclusivity can reduce emotional and psychological distance, encouraging a sense of connection and belonging among all participants, irrespective of gender.

Table 7: Result of Differentiation of Group Cohesion when participate in Outdoor Recreation Program between gender among FSR Student, UiTM Seremban

t-test for Equality of Means						
	Group	N	Mean	t	df	P value
Group Cohesiveness	Male	59	4.36	-1.35	116	.180
	Female	59	4.44			

Based on the result of Independent Sample T-Test on Table 7, there was no significant differences on the group cohesiveness that influenced participants to participate in outdoor recreation programs between gender among FSR Student, UiTM Seremban for the item “Group Cohesion”, $t(116) = -$

1.35, $p = 0.180$ (Male: $M = 4.36$, Female: $M = 4.44$). In this study, participants, both male and female, are drawn to group activities because they have basic social requirements. Both genders' group cohesiveness is probably similar because of this universal need for social interaction. According to Van Vugt et al., (2008), assert that harmonic group settings have the power to overcome individual variances, including gender-based ones. Gender disparities may be lessened by the dynamics of outdoor recreation programs, which may promote a sense of cohesion and shared purpose. Peer influence and cohesive group settings can promote comparable social behaviors and interests among members of all gender identities. Forsyth (2014) emphasizes that cohesiveness and communication are integral to group dynamics, with trust being a key element of cohesion. Effective communication is particularly important in outdoor recreation programs, where challenging situations can lead to conflicts.

Groups with strong communication skills are better at resolving disagreements, thereby enhancing cohesion and productivity (Jehn & Mannix, 2001). This interaction of communication and cohesion significantly contributes to the success of programs aimed at developing social and cooperative skills.

CONCLUSION

This study investigates the effectiveness of outdoor recreation programs in enhancing interpersonal communication and group cohesion among students at the Faculty of Sport Science and Recreation (FSR), UiTM Seremban. The research aimed to assess gender differences in communication and cohesion, finding no significant disparities, suggesting that these programs equally benefit both genders in emotional and psychological group dynamics. The study highlighted that activities promoting teamwork and effective interaction significantly enhance interpersonal skills and group cohesion. The findings can guide the improvement of future programs, emphasizing the development of soft skills and group cohesion, and suggest potential applications for community initiatives and mental health strategies through outdoor recreation.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to Universiti Teknologi MARA Perlis Branch for providing the necessary research resources. Additionally, the authors would also like to extend appreciation to the anonymous reviewers for their valuable suggestions.

FUNDING

This research did not receive any specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

AUTHORS' CONTRIBUTION

The authors confirm contributions to the paper as follows: study conception and design, data collection, and analysis was conducted by Ellail Ain Mohd Aznan and Siti Amalina Mohd Yazid while interpretation of results and draft manuscript preparation were undertaken by Muhammad Irfan Azhari and Mohd Khairulanwar Md Yusof. All authors reviewed the results and approved the final version of the manuscript.

CONFLICT OF INTEREST DECLARATION

I, the Corresponding Author, declare that this manuscript is original, has not been published before and is not currently being considered for publication elsewhere. I would like to draw the attention of the Editor to the following publications of one or more of us that refer to aspects of the manuscript presently being submitted. Where relevant copies of such publications are attached. I can confirm that the manuscript has been reviewed and approved by all named authors, and there are no other individuals who meet the criteria for authorship but are not listed. Additionally, I confirm that the order of authors listed in the manuscript has been agreed upon by all of us. I acknowledge that the Corresponding Author is the sole point of contact for the Editorial process and is responsible for communication with the other authors regarding progress, submissions of revisions and final approval of proofs. We affirm that all authors have significant contributions to the work, the validity and legitimacy of the data and its interpretation for submission to Jurnal Intelek.

REFERENCES

- Andre, E. K., Williams, N., Schwartz, F., & Bullard, C. (2017). Benefits of Campus Outdoor Recreation Programs: A Review of the Literature. *Journal of Outdoor Recreation, Education, and Leadership*, 9(1), 15–25. <https://doi.org/10.18666/jorel-2017-v9-i1-7491>
- Austin, M. L., Martin, B., Mittelstaedt, R., Schanning, K., & Ogle, D. (2009). *Outdoor Orientation Program Effects: Sense of Place and Social Benefits* (Vol. 31, Issue 3).
- Beery, T., Olsson, M. R., & Vitestam, M. (2021). Covid-19 and outdoor recreation management: Increased participation, connection to nature, and a look to climate adaptation. *Journal of Outdoor Recreation and Tourism*, 36. <https://doi.org/10.1016/j.jort.2021.100457>
- Bin, M. A., Jalaludin, M., Nor, M., & Ihkasan, B. (2014). *Interpersonal Communication Skills among the Master's Students in TVET*. 4(16). www.iiste.org
- Boies, K., Fiset, J., & Gill, H. (2015). Communication and trust are key: Unlocking the relationship between leadership and team performance and creativity. *Leadership Quarterly*, 26(6), 1080–1094. <https://doi.org/10.1016/j.leaqua.2015.07.007>
- Camden, J. (2011). *AUSTRALIA-WEATHER-FLOODS*. <https://doi.org/10.3316/informit.805876988065509>
- Carron, A. V., Widmeyer, W. N., & Brawley, L. R. (1985). The development of an instrument to assess cohesion in sport teams: The Group Environment Questionnaire. *Journal of Sport Psychology*, 7(3), 244–266.
- Chris Drew. (2023, September 6). *Group Cohesion: Definition*. Helpful Professor. <https://helpfulprofessor.com/group-cohesion/>
- Clark, B. S., & Anderson, D. M. (2011). “I’d Be Dead If I Didn’t Have This Class:” The Role of Leisure Education in College Student Development. In *Recreational Sports Journal* (Vol. 35).
- Cooley, S. J., Burns, V. E., & Cumming, J. (2015). The role of outdoor adventure education in facilitating groupwork in higher education. *Higher Education*, 69(4), 567–582. <https://doi.org/10.1007/s10734-014-9791-4>
- Cropanzano, R., Anthony, E. L., Daniels, S. R., & Hall, A. V. (2017). Social exchange theory: A critical review with theoretical remedies. In *Academy of Management Annals* (Vol. 11, Issue 1, pp. 479–516). Routledge. <https://doi.org/10.5465/annals.2015.0099>
- Cross, S. E., & Madson, L. (1997). Models of the Self: Self-Construals and Gender. In *Psychological Bulletin* (Vol. 122, Issue 1).
- de Vries, S., Verheij, R. A., Groenewegen, P. P., & Spreeuwenberg, P. (2003). Natural environments - Healthy environments? An exploratory analysis of the relationship between greenspace and health. *Environment and Planning A*, 35(10), 1717–1731. <https://doi.org/10.1068/a35111>
- Ebadi, Y. M., & Utterback, J. M. (2015). The Effects of Communication on Technological Innovation. *Management Science*, 30(5), 572–585. <https://doi.org/10.1287/mnsc.30.5.572>

- Eys, M., Loughead, T., Bray, S. R., & Carron, A. V. (2009). Development of a Cohesion Questionnaire for Youth: The Youth Sport Environment Questionnaire. In *Journal of Sport and Exercise Psychology* (Vol. 31).
- Eys, M., Ohlert, J., Blair Evans, M., Wolf, S. A., Martin, L. J., Van Bussel, M., & Steins, C. (2015). Cohesion and performance for female and male sport teams. *Sport Psychologist*, 29(2), 97–109. <https://doi.org/10.1123/tsp.2014-0027>
- Forsyth, D. R. (2014). *UR Scholarship Repository Group Dynamics*. <http://scholarship.richmond.edu/bookshelf>
- Fredricks, J. A., & Eccles, J. S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology*, 42(4), 698–713. <https://doi.org/10.1037/0012-1649.42.4.698>
- George Homans. (2018, April 20). *What Is Social Exchange Theory?* Scholl of Social Work. <https://socialwork.tulane.edu/blog/social-exchange-theory/>
- Godtman Kling, K., Margaryan, L., & Fuchs, M. (2020a). (In) equality in the outdoors: gender perspective on recreation and tourism media in the Swedish mountains. *Current Issues in Tourism*, 23(2), 233–247. <https://doi.org/10.1080/13683500.2018.1495698>
- Godtman Kling, K., Margaryan, L., & Fuchs, M. (2020b). (In) equality in the outdoors: gender perspective on recreation and tourism media in the Swedish mountains. *Current Issues in Tourism*, 23(2), 233–247. <https://doi.org/10.1080/13683500.2018.1495698>
- Ha, J. P., & Ha, J. (2015). Organizational justice-affective commitment relationship in a team sport setting: The moderating effect of group cohesion. *Journal of Management and Organization*, 21(1), 107–124. <https://doi.org/10.1017/jmo.2014.6>
- Izumi, B. T., Schulz, A. J., Mentz, G., Israel, B. A., Sand, S. L., Reyes, A. G., Hoston, B., Richardson, D., Gamboa, C., Rowe, Z., & Diaz, G. (2015). Leader Behaviors, Group Cohesion, and Participation in a Walking Group Program. *American Journal of Preventive Medicine*, 49(1), 41–49. <https://doi.org/10.1016/j.amepre.2015.01.019>
- Jehn, K. A., & Mannix, E. A. (2001). The Dynamic Nature of Conflict: A Longitudinal Study of Intragroup Conflict and Group Performance. In *Source: The Academy of Management Journal* (Vol. 44, Issue 2).
- John Terra. (2023, October 19). *What is Interpersonal Communication? Skills, Types, and Examples*.
- Simplilearn. <https://www.simplilearn.com/what-is-interpersonal-communication-article> Kassiani Nikolopoulou. (2022, August 11). *What Is Purposive Sampling?* Scribbr.
- Kim, M. S., & Bresnahan, M. (2009). Cognitive basis of gender communication: A cross-cultural investigation of perceived constraints in requesting. *Communication Quarterly*, 44(1), 53–69. <https://doi.org/10.1080/01463379609370000>
- Laura J. Burton, Gregory M. Kane, & John F. Borland. (2014). *Sport Leadership in the 21st Century* (Edition 2). Jones & Bartlett Publishers.
- Maehr, M. L., & Midgley, C. (2011). Enhancing Student Motivation: A Schoolwide Approach. *Educational Psychologist*, 26(3–4), 399–427. <https://doi.org/10.1080/00461520.1991.9653140>
- Mohd, M. A., Wirdati, S., & Radzi, M. (2017). A Study of Motivation in Outdoor Recreational Activities. *International Journal of Academic Research in Business and Social Sciences*, 7(3). <https://doi.org/10.6007/IJARBS/v7-i3/2742>
- Onağ, Z., & Tepeci, M. (2014). Team Effectiveness in Sport Teams: The Effects of Team Cohesion, Intra Team Communication and Team Norms on Team Member Satisfaction and Intent to Remain. *Procedia - Social and Behavioral Sciences*, 150, 420–428. <https://doi.org/10.1016/j.sbspro.2014.09.042>
- Overholt, J. R., & Ewert, A. (2015). Gender Matters: Exploring the Process of Developing Resilience Through Outdoor Adventure. *Journal of Experiential Education*, 38(1), 41–55. <https://doi.org/10.1177/1053825913513720>
- Pomohaci, M., & Sopa, I. S. (2018). Discovering the Cohesion of a Volleyball Team and Finding the Right Leader of the Group. *Land Forces Academy Review*, 23(1), 58–64.

- <https://doi.org/10.2478/raft-2018-0008>
- Radzi, W. M., Aman, M. S., & Yasim, M. M. (2017). *A Study of Participation Motive in Outdoor Recreational Activities*. <https://doi.org/10.6007/IJARBSS/v7-i3/2865>
- Selvaag, S. K., Keller, R., Aas, Ø., Gundersen, V., & Singsaas, F. T. (2022). On-site communication measures as a tool in outdoor recreation management: a systematic map protocol. *Environmental Evidence*, 11(1). <https://doi.org/10.1186/s13750-022-00261-3>
- Van Vugt, M., Hogan, R., & Kaiser, R. B. (2008). Leadership, Followership, and Evolution: Some Lessons From the Past. *American Psychologist*, 63(3), 182–196. <https://doi.org/10.1037/0003-066X.63.3.182>
- Wafiqah, S., Nor¹, M., Adli, M., Sidi, M., Azad Isa, K., Azam, Z., & Jengka, B. (2022). PARTICIPATION MOTIVES IN OUTDOOR PHYSICAL ACTIVITIES AT TAMAN RAKYAT KLANG, SELANGOR. In *Universiti Teknologi MARA Cawangan Pahang* (Vol. 25, Issue 01). <https://gadingss.learningdistance.org/eISSN:2600-7568|63>
- West, P. C., & Merriam, L. C. (2018). Outdoor Recreation and Family Cohesiveness: A Research Approach. *Journal of Leisure Research*, 2(4), 251–259. <https://doi.org/10.1080/00222216.1970.11970005>