Revista Românească pentru Educație Multidimensională
ISSN: 2066-7329 | e-ISSN: 2067-9270
Covered in: Web of Science (WOS); EBSCO; ERIH+; Google Scholar; Index Copernicus; Ideas RePeC; Econpapers; Socionet; CEEOL; Ulrich ProQuest; Cabell, Journalseek; Scipio; Philpapers; SHERPA/RoMEO repositories; KVK; WorldCat; CrossRef; CrossCheck

2022, Volume 14, Issue 4 Sup.1, pages: 234-247 | https://doi.org/10.18662/rrem/14.4Sup1/669
Submitted: July 14th, 2022 | *Accepted for publication:* August 26th, 2022

Personality Features–Decisive Factors in the Development of the Outdoor Education Activities

Veronica MINDRESCU[1], **Rocsana B. MANEA-TONIS**[2]

[1] Transilvania University of Brasov, Faculty of Physical Education and Mountain Sports, Department, Motor Performance, Brasov, Romania. veronica_mindrescu@yahoo.com
[2] National University of Physical Education and Sports, Faculty of Physical Education and Sport, Bucharest, Romania.

Abstract: The new perspective on outdoor education in sports identifies it as a method of unfolding that falls under psychosocial bearing. The main focus of our study is on ethical principles as a manifestation of accountability, respect, honesty, independence, self-control, and courage in young people's interpersonal relationships. This approach takes the stance that education entails the promotion of numerous types of personal and social advantages, especially the idea of personal wellbeing. It is stated that advancing this perspective offers the best suitable lens through which to examine the educational benefits of outdoor adventure activities. Our study revels personality features that are enriched by the outdoor education: initiative, perseverance, enthusiasm, tenacity, organizational aptitudes. The authentic relation man-nature, and the free spirit of outdoor education has positive impact on a harmonious healthy life of modern society.

Keywords: *personality features; outdoor education; physical activities; sports; cognition values.*

How to cite: Mindrescu, V., & Manea-Tonis, R.B. (2022). Personality Features–Decisive Factors in the Development of the Outdoor Education Activities. *Revista Românească pentru Educație Multidimensională, 14*(4Sup1), 234-247. https://doi.org/10.18662/rrem/14.4Sup1/669

©2022 Published by LUMEN Publishing. This is an open access article under the CC BY-NC-ND license http://creativecommons.org/licenses/by-nc-nd/4.0/

Introduction

Outdoor activities are associated with persons that spend leisure time doing physical activities for fun, maintaining health, relax and rest, need for excitement and adventure, communication. Some examples of outdoor physical education activities are running, jumping, hiking, throwing objects into natural environment, or field sports (baseball, softball, cricket, and other batting sports) or court sports (any teams sports: football, volley, basket, rugby, etc). They have the aim of developing the student's learning interest, motivation, survival skills (in campaign, trail, orientation for example), personalities, team communication and interaction. They require basic training and skills. While outdoor sport can form a new category of professional sports practiced within the natural environment with exploratory and challenging unique experiences (Liu & Chen, 2015). Outdoor sports require specific training and skills and might be represented by boating, surfing, swimming, diving, skiing, or court sports. The main difference between a field sport and a court sport is that the first ones are practiced into an open country not surrounded by cities and the players has the aim to intercept or catch (a ball) and play it, while the court sports are practiced into a courtyard, near a locality and the players has the aim to win (Eigenschenk et al., 2019; Rocher et al., 2020).

Many authors discussed the traits that are frequently encountered in outdoor sports. Liu & Chen 2015 talks about wealth of theoretical knowledge, practical skills and overall leadership skills (planning, organizational ability, risk response capacity). Other authors talk about strategic skills and knowledge such as learning orientation knowledge, led for practicing and mastering and applying integrated skills (Eigenschenk et al., 2019).

The outdoor sports have a very important role in reforming of physical education, introducing an innovative curriculum, in facilitating the development of students' physical and psychological skills, strengthening the ability of social adaptation and enhancing comprehensive abilities (Kwon et al., 2021; Sanderud et al., 2021; Xu et al., 2019; Zhang & Zhang, 2016).

The results of the outdoor activity plans and their inherent difficulties are the main subjects of the current study. The current study assesses the effectiveness of the outdoor education programs created at the Sovata Specialized Center in relation to the group's personality traits. The focus of the current analysis is on self-awareness and encouraging observation over other factors. It tracked the effects and changes

determined by the outdoor education activities on the pupils' personality traits.

Theoretical background

Our study was grounded on a literature review research design. We search on Web of Science different articles published lately. Our research was based on topics like: "outdoor education and sports", "personality traits" (Topic) and 2019-2022 (Year Published) and Articles or Review Articles (Document Types) and all categories from (Web of Science Categories). As a result, only 170 papers were returned. It had been selected only papers written in English, open source - with full text available and with specificity on the article subject. In Figure 1 are presented the authors with high visibility that wrote on the same theme and the link between themes.

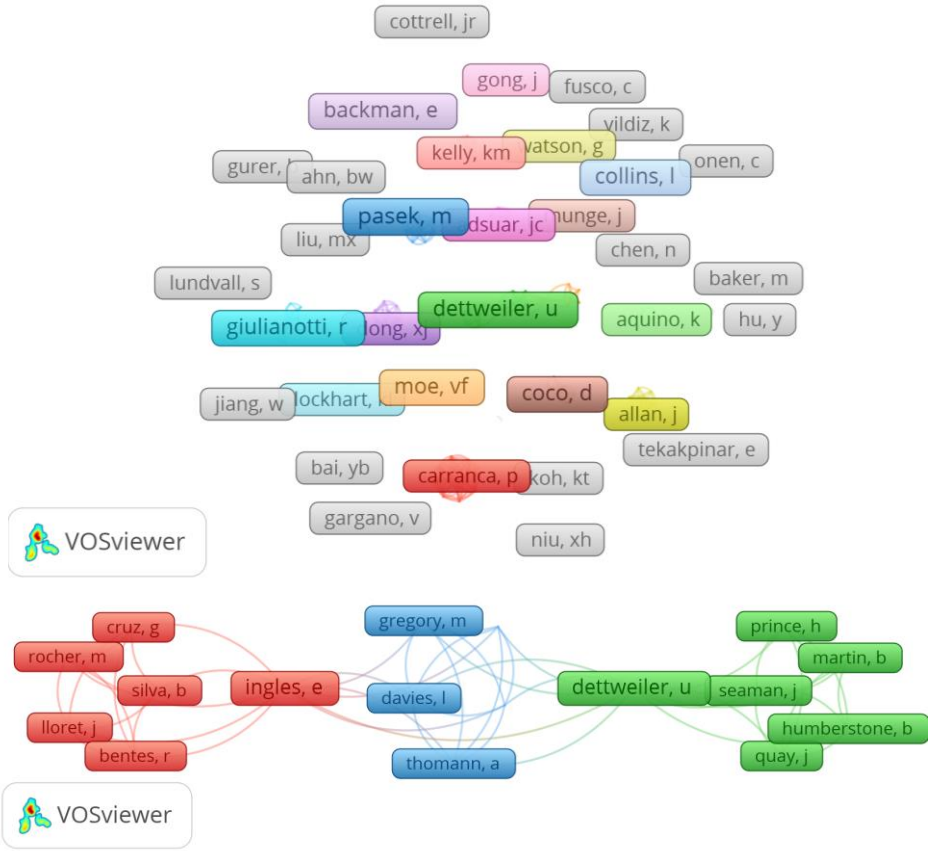


Figure 1. Author mapping of published papers from 2019 to 2020 (Source: VOSviwer version 1.6.18 (June 2022)

For the theoretical research it had been used VOSviewer Software as to obtain professional overview on scientific papers published in between 2012-2022 years. Figure 1 facilitate a clear mapping of authors that have published articles on discussed and simulated in this research, colored by year.

The interest for outdoor sports must be increased in order to develop a healthy and sustainable population, having in mind the increased level of pollution, and the affections caused by the static activities in front of mobile devices, especially for young population. In the same time the students are taught to protect the natural ecological environment, but also ensure the healthy and sustainable development of human society (Backman & Svensson, 2022; Bai et al., 2022)

In outdoor activities and sports prevail experiential learning, used as a method of linking academic knowledge and practical skills, immersing the students into specific activities that involve critical thinking, courage, taking initiative and assuming responsibility, fair-play, teamwork, planning and organizational skills, endurance, and enthusiasm (Fernández-Gámez, 2018). The authors cluster these traits in four dimensions: 1) happiness (Self-esteem, enthusiasm, confidence), 2) emotional ability– capacity of perceiving and expressing feeling and positively lead themselves and other students to meet the objectives 3) sociability (communication, empathy, assertiveness, leadership: taking initiative and aptitude to forecast, plan, organize) 4) self-control (perseverance, responsibility, adaptability, managing stress emotions, and impulses).

Analyzing the students' traits that are developed through outdoor activities and sport it might be deduced their importance as part of physical education curriculums and the great practical implications. Thus, innovative curriculum has to be developed as to harvest the traits presented in the four dimension above and bust theoretical skills and practical abilities (Collins & Carson, 2021; Xu et al., 2019).

Some of outdoor sport belong to the category adventure and extreme sports (AESs). These sports require extra attention because imply high risk of injury and even death. Not all the students can practice these sports. They have to be tested before and meet all the traits enunciated before at high lever and a very well fitness and strong health, because for some of them AESs reflects social deviance (Brymer & Feletti, 2020). Complex studies were done as to evaluate outdoor sport climbing and bouldering performance with many tests and resulted that climbing performance is mainly influenced by openness and agreeableness (Ionel et al., 2021). There are also other uncommon sports, such as disc golf, that is

on an ascendent trend and is influenced by social variables including gender, race, geography, age, education (Woods, 2019).

Success in various areas of human endeavor presupposes the presence of certain mental and psychological resources. These are examples of people's unique qualities that they must possess in order to perform certain tasks at a high level (Chelcea, 1982). Other authors talk about other benefits and impacts of outdoor sports, such as physical and mental health, education and life-long learning, active citizenship, crime, and anti-social mitigation, etc (Eigenschenk et al., 2019; Rocher et al. 2020). In order to comprehend the dynamics of retracing outdoor education activities, the present research analyses the findings of a study on personality traits. These character attributes were emphasized because they can help outdoor education activities be successful (Ogoshi et al., 2018; Presta et al., 2021).

As a result, it is reasonable to expect that participants who redesign outdoor education programs face two demands: first, from the standpoint of the activity circumstances; second, from a social and psychological perspective, as a result of their interactions with other participants (Chelcea, 1982). Knowing the participants' personality traits helps to clarify the educational goals of a program of outdoor activities that aims to develop certain attitudes, such as respect for oneself and others, certain personality traits, and healthy life habits and customs. These expectations form the basis of the educational act of the outdoor education activities. (Moldovan, 2007; Morgan et al., 2019; Richards & Grice, 2003).

In order to reach both their own and other people's potential, people must be aware of the need of determining and improving their mental and psychological personality assets through appreciation in 1984 by Zapan and in 2012 by Guhn et al.

The physical and emotional plans are impacted by the outdoor education activities. As a result of participating in these kinds of activities, participants gain a variety of skills and abilities that help them perform better on a personal level. In addition, group members' recognition of the difficulties that arise during outdoor activities helps develop personalities both within the programs and in "real life" (Humberstone; 1997, Wojtyczek et. al, 2014).

The primary goal of outdoor activities is to promote the development of certain personality traits that are highly valued by society, such as leadership, perseverance, enthusiasm, tenacity, organizational aptitudes, courage, and particular aptitudes (Feşteu, 1999; Zhang et al., 2016). Additionally, the dynamics that define them—the abrupt or gradual changes that occur at their level—must be taken into account in the

examination of personality traits. Additionally, the circumstances under which these changes occur as well as the psychological and social elements that influence their evolution need to be established. Varied attitudes toward the developing activity and different relationships between the group members are also determined by the dynamic nature of outdoor activities. We may say that a person doesn't exhibit the same kind of conduct or attitude toward the developed activity as different members (Gaudreau et al., 2015).

There are also circumstances in which a participant can behave differently toward the particular activity and the same individual while still being that participant. What aspects of a person's personality are predisposed to a greater dynamic of inspiring them to establish activities and social interactions with others, given these premises? The need to understand those psychological and mental traits and personality traits that influence the motivation to participate in outdoor activities was the driving force behind the selection of the study's theme. This knowledge will allow for intervention in the event that some disorderly events arise during the appreciation of these activities (Hnizdilova et al., 2021a; 2021b).

Experimental hypothesis

The experimental presumption for this study was that outdoor activities would have a substantial impact on the personality traits of the student group leading the activities in accordance with the course's analytical plan for "Outdoor education." The test manifests in the qualitative assessment on the grounds of an appraisal scale of personality traits at the student group, which is the most typical and natural method for defining personality traits (Wicks, 1999).

The study was conducted during the 2020–2021 academic year at the Faculty of Physical Education and Sports in Braşov by administering a questionnaire to 33 third-year students in two phases: during the first course and at the conclusion of the practical essay for the "Outdoor education" course.

Research methods

The documentation approach, observation method, questionnaire-based inquiry method, statistical-mathematical method, and graphical method were the foundations for this study.

Assessment of the personality traits seeks to identify them in a realistic and objective manner. The students were asked to rank the

following personality traits on a scale of 1 to 10, according to their importance and contribution to the tourism activities: leadership, enthusiasm, tenacity, organizational aptitudes, attitude, courage, special skills and abilities, commitment, fair-play, and critical spirit.

The following is the model for the questionnaire used to rate personality traits: "Mark from 1 to 10 which of the personality traits from the chart below you think important and had the greatest influence on your participation in outdoor activities.

Results

To create a more distinct picture of the personality traits, the data from the student responses to the surveys was centralized in accordance with the rating scale of the traits they expressed. The third-year student group that completed the analytical program as part of the "Outdoor education" program had the following findings of the personality feature evaluation based on the mean obtained at the first and final testing:

Tabel 1: The rankings for the students' group's average personality traits based on their values (initial and final evaluation)

No.	Personality features	Initial testing		Final testing			
		Average	Degree	Average	Degree	**D**	d^2
1	Courage	2,78	6	6,84	7	-1	1
2	Responsibility	2,75	7	5,21	10	-3	9
3	Perseverance	3,21	5	8,75	2	3	9
4	Critic spirit	1,87	10	5,63	9	1	1
5	Leadership	4,51	3	9	1	2	4
6	ptitude to organize	4,90	1	7,06	6	-5	25
7	Fair-play	2,75	9	6,57	8	1	1
8	Tenacity	3,57	4	8,48	4	0	0
9	Special aptitudes	2,54	8	7,66	5	3	9
10	Enthusiasm	4,78	2	8,54	3	-1	1

Source: Authors' own conception

In this way, the questionnaire data from the students was collected, organized, and processed into the following chart: In this experiment, the sum was computed as the product of the amount of observations and the rank on the evaluation scale, and the average, which is the sum divided by the total participants in the group, was calculated (133 participants).

Following the average's computation, the variations for each personality feature were determined, with the average values being reported in decreasing order starting with the average 1 and steadily declining to the ranges 2 to 10.

The chart with the mean earnings and the provided range for each personality feature was created based on the ranges obtained during both tests, and the difference between the provided values and the two test phases was then calculated.

Following statistical analysis, a correlative comparison of the tests was conducted to determine whether there was a significant objective-mathematical relationship between them. This provided us with a scientific basis for choosing the most effective types of activity that can have a positive impact on the youth's personality traits.

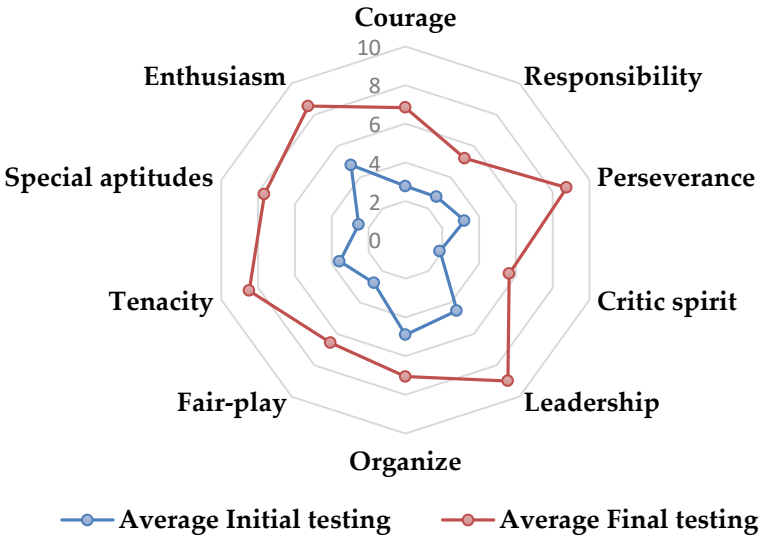


Figure. 2 Diagram showing the student group's comparative findings for the qualitative assessment of personality traits during the beginning and final tests
Source: Authors' own conception

The above graphic makes clear the significant difference between the two assessments of the personality traits impacted by outdoor activities. After gaining practical experience in the different activity forms, the students recognized the significance of the personality traits that had been researched and provided higher averages. They valued those qualities that were assumed in the ability to adapt to the actions they underwent with a sharp increase toward the initial evaluation, such as the leadership, which they gave an

average of 4.51 to at the first test but later deemed to be of utmost importance and placed first with an average of 9. In contrast to the initial test, where courage was valued with an average score of 2.78, students valued courage at the final test with an average score of 6.84. Comprehensive review of the index's modification on the scale used to rate the appreciation of personality traits reveals a number of differences that were discovered to have a significant influence in both evaluation cases.

Table 2: *T test two sample for pair means*

	Initial	*Final*
Media	3.366	7.374
Variance	1.08	1.77
Observations	10.00	10
Pearson Correlation Coefficient	0.61	
Hypothetic means of differention	0.00	
Degree of liberty	9.00	
T Statistic	-11.68	
P(T<=t) one tail	0.00	
T critic (one tail)	1.83	
P(T<=t) two tails	0.00	
T critic (two tails)	2.26	

Source: Authors' own conception

H1: The program's activities had a favorable and significant impact on the personality traits that the student's attributes demand in a particular way, such as leadership, tenacity, enthusiasm, determination, and organizational skills.

The T test confirm our hypothesis, because T statistic (-11.68) in module is higher than T two tail (2.26). Being negative it might be stated that the final average is higher than the initial average. P(T<=t) two tails is less than 0.05, meaning that the error made by us when assuming H1 is less than 0.05.

The T test give us the opportunity to extrapolate the H1 hypothesis over the entire statistical population.

The degree to which social and ethical knowledge learned in academic institutions is put into application is determined by a variety of situational conditions that are challenging to evaluate. The dissemination of social information and the promotion of social behavior are crucial for

educational activities (Chircev, 1983). The following processes appear to be acceptable for taking place in outdoor adventure education (Tucker, 2002).

Outdoor educational interventions can be extremely beneficial in assisting groups and individuals to acquire higher levels of implementation and awareness, but unless relatively long, natural living approaches are the main intention, the value of reserves and endeavors used for a venture into the forest remains slightly ambiguous. Increasing group confidence by observation, debate, and questioning the group, getting advice from faculty professors, getting advice from people who have traveled with the same leader, and more (Mackintosh et al., 2018).

A month subsequently the activity, volunteers must show up for a crucial session. They will be provided advice about the journey, the destination, and the expected sequence of events. The funds and equipment required will also be provided. Participants will be questioned about the sports they play or if they enjoy outdoor activities.

Discussion and Conclusions

1. Based on the preferences and abilities of the students, we can evaluate outdoor education and come to the conclusion that the program's operations significantly and positively influenced those personality traits that the students need, such as leadership, tenacity, enthusiasm, tenacity, and organizational skills. The order of these is important, too. Other authors (Fernández-Gámez, 2018) classify these traits under 4 dimensions happiness (that include self-esteem, enthusiasm…), emotional ability, sociability (fair-play,) and self-control (that include initiative, perseverance, tenacity, critical thinking, planning skills). At the same time, they stimulate the student's learning enthusiasm, impetus of getting implied in new experiences, that can be successfully fulfilled due to a good team interaction and communication (Eigenschenk et al., 2019, Liu & Chen, 2015; Rocher et al., 2020)

2. Upon passing through the "Outdoor education" analytical program, the results show a very different enjoyment level. The findings support the claim that certain genius personality traits are necessary for the activity being performed. As a consequence, the outdoor sports have a decisive influence in improving or even revolutionize the physical education curriculum, through innovative methods of teaching (Kwon et al., 2021; Xu et al., 2019; Zhang & Zhang, 2016).

3. In the genuine relationship between man and environment, there are new values of cognition and agreement, such as new values of health that more effectively correspond with the physical, mental, and psychological values of outdoor education. Lastly, outdoor education and free spirit

education help people relearn how to live in harmony with the environment and society. The same idea is sustained by other authors that consider a very strong interdependence between a healthy population and a natural ecological environment. An ecological environment will offer the students the opportunity to practice outdoor activities and sports and maintain a high level of health. And a healthy population will have resources to protect the environment (Bai et al., 2022). These outdoor activities have a stronger influence over the student attitude concerning environment than demographic characteristics, or subjective assessment of the financial satisfaction level (Pasek, 2021).

References

Backman, E., & Svensson, D. (2022) Where does environmental sustainability fit in the changing landscapes of outdoor sports? An analysis of logics of practice in artificial sport landscapes. *Sport, Education and Society*. https://doi.org/10.1080/13573322.2022.2073586

Bai, Y. B. Zhao, J. X., & Wei, Y. W. (2022). Influence of ecological environment on the Development of Outdoor Sports. *Journal of Environmental Protection and Ecology, 23*(3), 1175-1184.

Brymer, E., & Feletti, F. (2020), Beyond risk: the importance of adventure in the everyday life of young people. *Annals of Leisure Research, 23*(3), 429-446, https://doi.org/10.1080/11745398.2019.1659837

Chelcea, S. (1982). *Psychological experiment*. Scientific and Encyclopedically Publishing House.

Chircev, A. (1983). Conditions of forming notions, convictions and moral in proportion to behavior, in the education and development. In I. Radu (coord.), *Psychology* (pp. 111-164). R.S.R Academy's Publishing House.

Collins, L., & Carson, H. J. (2021), Proposing a new conceptualisation for modern sport based on environmental and regulatory constraints: implications for research, coach education and professional practice. *Journal of Adventure Education and Outdoor Learning, 22*(3), 228-238. https://doi.org/10.1080/14729679.2021.1902829

Eigenschenk, B., Thomann, A., McClure, M., Davies, L., Gregory, M., Dettweiler, U., & Inglés E. (2019). *Benefits of Outdoor Sports for Society. A Systematic Literature Review and Reflections on Evidence. International Journal of Environmental Research and Public Health, 16*(6), 937. https://doi.org/10.3390/ijerph16060937

Fernandez-Gamez, M. A., Rosales-Perez, A., Molina-Gomez, J., & Mora-Lucena, L. (2018), The effects of outdoor training on the development of emotional intelligence among undergraduate tourism students. *Journal of hospitality,*

leisure, sport and tourism education, 23, 39-49. https://doi.org/10.1016/j.jhlste.2018.06.001

Feşteu, D. (1999). *Educaţie şi aventură* (Education and adventure). Publishing House Aldus.

Gaudreau, P., Gunnell, K. E., Hoar, S. D., Thompson, A., & Lelièvre, J. (2015). Optimism, pessimism, and coping in a dual-domain model of sport and school satisfaction. *Sport, Exercise, and Performance Psychology, 4*(2), 140–152. https://doi.org/10.1037/spy0000032

Guhn, M., Schonert-Reichl, K. A., Gadermann, A. M., Marriott D., Pedrini L., & Hymel, S. (2012). Well-Being in Middle Childhood: An Assets-Based Population-Level Research-to-Action Project. *Child Indicators Research, 5*, 393–418. https://doi.org/10.1007/s12187-012-9136-8

Hnizdilova, O, Vilkhova, O, Zimakova, L, Pasichnichenko, A., Kovalevska, N. (2021). Analyzing the Nonstandard Sports Equipment as an Efficient Measure of Provoking Pre-schoolers Motor Activity. *Journal of Research in Medical and Dental Scinece, 9*(7), 425-431. https://www.jrmds.in/articles/analyzing-the-nonstandard-sports-equipment-as-an-efficient-measure-of-provoking-preschoolers-motor-activity.pdf

Hnizdilova, O., Vilkhova, O., Zimakova, L. Pasichnichenko, A., & Kovalevska, N. (2021). Non-Standard Sports Equipment as an Effective Means of Stimulating Motor Activity of Preschoolers. *Journal of Research in Medical and Dental Scinece, 9*(4), 178-185. https://www.jrmds.in/articles/nonstandard-sports-equipment-as-an-effective-means-of-stimulating-motor-activity-of-preschoolers.pdf

Humberstone, B. J. (1997). Perspectives on Research in Outdoor Education Values and Ethics. *Journal of Adventure Education and Outdoor Leadership, 14*(1), 11.

Ionel, M. S., Ion, A., & Visu-Petra, L. (2021). Personality, grit, and performance in rock-climbing: down to the nitty-gritty. *International Journal of Sport and Exercise Psychology*. https://doi.org/10.1080/1612197X.2022.2044368

Kwon, Y. H., Cheung, Y. K, & Ahn, B. W. T. I. (2021). Effect of Outdoor Sports Participants on Leisure Facilitation, Recreation Specialization, and Leisure Satisfaction: Yacht and Golf Participants. *International Journal of Environmental Research and Public Health, 18*(15), 8128. https://doi.org/10.3390/ijerph18158128

Liu, J., & Chen, L. (2015). Quality Requirements and Promotion of Professional Outdoor Sports Leader. *Proceedings of the 2015 International Conference on Social Science, Education, Management and Sports Education* (pp. 2193-2196). Atlantis Press. https://doi.org/10.2991/ssemse-15.2015.553

Mackintosh, C., Griggs, G., & Tate, R. (2018), Understanding the growth in outdoor recreation participation: an opportunity for sport development in

the United Kingdom. *Managing Sport and Leisure, 23*(4-6), 315-335. https://doi.org/10.1080/23750472.2019.1595093

Moldovan, E. (2007). *The concepts and practice of traditional and modern forms of active tourism*. Transilvania.

Morgan, H., Parker, A., & Roberts, W. (2019). Community sport programmes and social inclusion: what role for positive psychological capital? *Sport in Society, 22*(6), 1100-1114. https://doi.org/10.1080/17430437.2019.1565397

Ogoshi, Y., Ogoshi, S., & Emoto, A. (2018). Development of an Education Support System for Children with Developmental Disabilities - Suggestion the special supported room using information technology. *2018 IEEE 10TH International Conference on Engineering Education (ICEED)* (pp. 45-48). IEEE. https://doi.org/10.1109/ICEED.2018.8626897

Pasek, M. (2021). Outdoor vs indoor physical education lessons as an opportunity to shape environmental attitudes. *Baltic Journal of Health and Physical Activity, 13*, 43-51, https://doi.org/10.29359/BJHPA.13.Spec.Iss1.04

Presta, V., Vitale, C., Ambrosini, L., & Gobbi, G. (2021). Stereopsis in Sports: Visual Skills and Visuomotor Integration Models in Professional and Non-Professional Athletes. *International Journal of Environmental Research and Public Health, 18*(21), 11281. https://doi.org/10.3390/ijerph182111281

Richards, K., & Grice, S. (2003). *West Yorkshire Police Inclusion Programme at Brathay. An interim evaluation report.* Unpublished Internal Report: Brathay Hall Trust.

Rocher, M., Silva, B., Cruz, G., Bentes, R., Lloret, J., & Ingles, E. (2020). Benefits of Outdoor Sports in Blue Spaces. The Case of School Nautical Activities in Viana do Castelo. *International Journal of Environmental Research and Public Health, 17*(22), 8470. https://doi.org/10.3390/ijerph17228470

Sanderud, J. R., Gurholt, K. P., & Moe, V. F. (2021). Didactic sensitivity to children and place: a contribution to outdoor education cultures. *Sport, Education and Society*. https://doi.org/10.1080/13573322.2021.1966409

Tucker, N. D. (2002). *Adventure Education / Development Training: Learning Process and Outcomes. Brathay Hall Trust: A Case Study* [Unpublished PhD Thesis]. The University of Nottingham.

Wicks, S. (1999). *The facilitator's stories. A phenomenological study of facilitator's experiences of excellence in outdoor management development work* [Unpublished Master's Thesis]. University of Surrey.

Wojtyczek, B., Paslawska, M., & Raschner, C. (2014). Changes in the Balance Performance of Polish Recreational Skiers after Seven Days of Alpine Skiing. *Journal of Human Kinetics, 44*(1), 29-40. https://doi.org/10.2478/hukin-2014-0108

Woods, J. (2019). Using Social Media to Estimate the Size and Demographic Characteristics of Hard-to-Reach Sport Communities: The Case of Disc

Golf. *International Journal of Sport Communication, 12*(1), 36-54. https://doi.org/10.1123/ijsc.2018-0126

Xu, D.B., Niu, X.H., Zhang, Q., Liu, Z., & Su, J. (2019). Innovation System of "Base Group" in Outdoor Sports Practice Teaching in Universities. *Proceedings of the First International Symposium on Management and Social Sciences (ISMSS 2019), 309* (pp. 305-311). Atlantis Press. https://doi.org/10.2991/ismss-19.2019.66

Zapan, G. (1984). *Objective acknowledgement and appreciation of personality*. Scientific and Encyclopedically Publishing House.

Zhang, X., & Zhang, H. (2016). Study on Promoting Undergraduates' Sociality Development by Outdoor Expanding Sports. *Third International Conference on Economic and Business Management and Educational Innovation* (EBMEI 2016), (pp. 401-405). EBMEI.

Zhang, Y., Wang, F., Yang, J., Dong, Q., & Guo, M. (2016). Action Research on Sensory Integration Training Integrated into Children's Sports Activities. *Proceedings of the 2015 3rd International Conference on Education, Management, Arts, Economics and Social Sccience, 3rd International Conference on Education, Management, Arts, Economics and Social Science (ICEMAESS), 49*, (pp. 1099-1104). ICEMAESS.