
**The Impact of Adventure Based Activity at Malaysian National Service Training
Programme on Team Cohesion: A Demographic Analysis**

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International Journal of Sport Management Recreation & Tourism, Vol.10, pp.64-79, 2012

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To link to this article: <http://dx.doi.org/>

DOI: 10.5199/ijsmart-1791-874X-10d

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Abstract

The present study examines the effects of physical module elements (adventure based activity) included in the Malaysian National Service Programme and to investigate the socio-demographic variables impact on team cohesion building among the participants. In this study, the participants were selected from three different camps, namely, Tasoh camp, Guar Chenderai camp and Meranti camp, located in the state of Perlis, Malaysia. The participants were those from the second batch intake in the year 2007. The sample sizes comprised of 994 participants (480=males, 514=females). The present study applied a pre-test and post-test design. The group was tested before and after the programme. This design was chosen because it could measure the impacts of the adventure-based activity towards team cohesion over time through the pre- and post-test scores (Berg & Latin, 2004). The variables comprised of the demographic factors (age, gender and place of residence), which included team cohesion were measured by Group Environmental Questionnaire (GEQ) (Carron, Widmeyer, & Brawley, 1985). Results indicated that the participants of the National Service Training Programme underwent group cohesion change during the Physical Module activities (adventure based activities) that were carried out at the camp. The changes were observable based on the statistically analyzed data during the pre and post-test.

Keywords: demographic; national service training programme; adventure based activity; team cohesion

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Introduction

The Youth Training Programme, which is better known as National Service Training Programme was launched by the Malaysian government on 16th February 2004. This programme is commonly known as Program Latihan Khidmat Negara (PLKN) among Malaysian. The target groups for this programme are Malaysian youths, particularly aimed for teenagers (average age 17) who have just completed the Malaysian Education Certificate (SPM) examination. The idea of the programme originated from the National Patriotism Congress which was held on 24th October 2002 in Bangi, Selangor, Malaysia. The participants who attended the congress were politicians, heads of departments from government ministries, private agencies, academicians and students. One of its resolutions was to develop unity among Malaysian adolescents in order to improve the process of national integration. The objectives of the National Service Training Programme are to build good personality and develop the spirit of nationalism among adolescents, improve national integration and increase positive attitude towards the programme. In order to achieve these objectives, four main modules were introduced to the participants, namely, physical module (adventure-based activity), nation building module, character building and community service module. All these modules focus on the experiential based learning principles. Experiential based teaching methodology, which utilizes adventure-based activities, is a valid, viable and potentially powerful method for teaching sport psychology concepts to youths.

Adventure-based activity is claimed to provide open-ended, dynamic, varied activities and risks which are assumed to contribute for learning enrichment and developing social competence (Greenfield, 2004), and has the potential to accelerate change in personal and social development in individuals through its setting and process (Sheard & Golby, 2006). Researchers have listed adventure-based activity as a powerful medium for teaching and learning processes and acting as social agent of changes (Alien-Craig & Miller, 2007). However, many researchers have also challenged

this idea as recent adventure-based activity practices have failed to provide strong evidence for the improvement of team cohesion (Bogner, 2002).

Jacob-Johnson (2004) highlighted four major sources of status within activity. These included an individual's physical (e.g., performance, experience, role, position), psychological (e.g., positive attitude, team spirit) and demographic attributes (e.g., age), as well as the participant's relationship with external others (e.g., parental support). One common type of activity status that results from a combination of the aforementioned sources is 'starting status'. Predominately a reflection of both physical and psychological attributes, two general categories of starting status are commonly considered (Beauchamp, Bray, Eys & Carron, 2005; Connelly, 1992; Granito & Rainey, 1988; Gruber & Gray; 1982). First, are the 'starters' (starting participants) are classified as those participant who begin the activity on the activity surface and typically receive regular activity time (participants who are familiar with a particular type of activity). Second, are the 'non-starters' (non-starting participants) are those who are typically do not have experience on the activity surface and receive limited or none activity time (participants who are not familiar with a particular type of activity) (Eys, Carron, Bray, & Beauchamp, 2003).

However, a number of limitations prevent more firm understanding regarding satisfaction and cohesion as they pertain to starting status. First, in several cases, the generalizability of the results is limited due to the fact that the researchers focused on one specific activity within their studies (e.g. cross country, flying-fox operations, abseiling) or one gender (e.g. males or females only). Second recent multidimensional conceptualizations and operationalization of satisfaction (Riemer & Chelladurai, 1998) and cohesion (Eys, Loughhead, Bray, & Carron, 2009) within activity allow for more in-depth examination of these constructs in comparison to some of the earlier work that utilized a one-dimensional approach. The potential implication of the current research is clear: perceptions of cohesion among participants are linked with adherence behaviour in adventure-based activity trainings. A closer examination of which facets of satisfaction and cohesion are linked to a participant's status will allow a more focused approach to intervention, greater consideration toward participants at the youth level with respects to their contribution to their team and potential continued involvement of these participants in the adventure-based activities.

Tuckman (1965) proposed that predisposing factors have influence in an individual's knowledge in the adventure-based activity; therefore, the literature discussed

in the following section will focus more on the influence of predisposing factors (age, gender and place of residence) on team cohesion. McNamara (2002) utilized a case study approach to examine boys aged 9 to 11 years who had suffered from abuse and neglect. The subjects were exposed to a local adventure challenge programme. The purposes of the programme were to determine how and why the programme impacted the participants' self concept and interpersonal skills. The data analysis indicated that the programme had a positive impact on the participant's self-concept. Meanwhile, additional positive effects were noted in cooperation, problem solving, sharing, anger management, responsibility, communication and trust.

In his study, Stoddart (2004) found that through participation in adventurous adventure-based activities, the young people were able to strengthen group bonds and establish group norms relating to trust and mutual support within the group. Another study by Henderson (2001) revealed that the results showed that camp had a positive influence on self relatively short periods of time across all the age groups, but this was particularly observed among younger participants. However, it is important to note that there are findings of other research which have suggested that older adolescence is a period during which self-concept is somewhat resilient to change (Hattie, March, Neill, and Richards, 1997). Garst, Scheider, and Baker, (2001) found that when joining adventure-based activity and released from pressure of reading and writing, young people discovered new thinking and capabilities. The difference between the way in which men and women experience the adventure-based activity is a topic that has generated significant discussions over the past fifty years from scholars in a number of fields, including historians, feminist, male right activist and educators (Leupp, 2007). In their research, Bjerke, Thrane, and Kleiven (2006) found that there is a weak tendency for women to be more concerned in the activity rather than men. In contrast, Hattie (1997) found no difference in the overall size of the outcomes for the males and females. While it is recognized that boys may benefit more from physical challenges and girls get more from emotional exploration, Hattie (1997) maintains that while programmes have been found to impact genders differently, they do so equally. The research by Alp, Ertepinar, Takkaya, and Yilmaz (2006) indicates that the effect of gender on the attitudes towards the adventure-based activity was statistically significant, and this was in favour of girls. The recent study carried out by Klassen, (2010) revealed that rural youth have shown more significant relationships with adventure-based activity due to the extra opportunity with the activity. As for the urban youth, however, the researcher noted that

they possessed similar concerns over the adventure-based activity but this was slightly less than those of the rural youth. This finding is supported by Shepard and Speelmans (1986) who measured the impact of participating in an adventure-based activity programme at the residence 4-H camps in Ohio on children ages 9 to 14. Their study recommended that the participants from the urban areas received an initial period of acclimation to the adventure-based activity before the activity was introduced due to their relatively limited exposure to the activity on a regular basis. Meanwhile, the findings of several studies concluded that the residence in an urban area is generally associated with greater adventure-based activity lover (Buttel, 1992; Mohai, 1992).

Objectives of this research were to study the effects of physical module elements (adventure based activity) included in the youth training programme and to examine the socio-demographic variables such as age, gender, and place of living in influencing team cohesion.

Methodology

The use of a quantitative approach is typically regarded for problems related to the efficacy of an intervention, the identification of factors that influence an outcome, or understanding of the best predictors of the outcomes. Furthermore, the quantitative methods were hoped to be able to identify factors influencing an outcome, measure the effectiveness of an intervention, or test a theory or an explanation (Creswell, 2003).

The present study applied a pre-test and post-test design (Baumgartner & Hensley, 2006). The group was tested before and after the programme. This design was chosen because it could measure the impacts of the adventure-based activity towards team cohesion over time through the pre- and post-test scores (Berg & Latin, 2004). The variables comprised of the demographic factors (age, gender and place of residence), which included team cohesion were measured by Group Environmental Questionnaire (GEQ) (Carron, Widmeyer, & Brawley, 1985). The items are based on 5-point of Likert like scale ranging from 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree). In this study, modified Group Environmental Questionnaire was used. The Group Environmental Questionnaire was widely used by many researchers to measure team cohesion (Altman, Estes, & Tittle, 2006; Campbell, Hanna, Tice, & Meyer, 2000; Carron, Bray, & Eys, 2002; Chang & Bordia, 2006; Heuze, Raimbault, & Fontayne, 2006; Kamphoff, Gill, & Huddleston, 2005; Mugford & Tennant, 2005).

Sample

In this study, the participants were selected from three different camps, namely, Tasoh camp, Guar Chenderai camp and Meranti camp, located in the state of Perlis, Malaysia and the all information data of the participants (name, place of origin, etc.) were gathered from the National Service Training Department (Jabatan Latihan Khidmat Negara, JLKN). The participants were those from the second batch intake in the year 2007. The sample sizes comprised of 994 participants (480=males, 514=females).

Questionnaire

For the purpose of gathering the required data in this study, research instruments were administered to the participants. The instruments comprised of two parts of survey. The first part asked on demographic questions and the second part consisted of items asking about team cohesion. The participants were initially required to provide demographic and background information which includes their age, gender and place of residence. All these variables are important as they influence team cohesion and they were utilized to establish a background profile of the participants.

Results

The quantitative results (from various demographic factors) were drawn from the Group Environment Questionnaire (GEQ) whereby a total of 994 participants (n=994) (480 males and 514 females) participated in the National Service Training Programme. Data were analysed using Statistical Package for Social Science (SPSS) programme. As indicated in Table 1, a total of 994 respondents participated in this study in which the numbers of respondents (n) at each camp are n=324 from Meranti camp (32.6 %), n=321 from Tasoh camp (32.3 %), n=349 (35.1 %) from Guar Chenderai Camp. The sample was selected using census technique. The details showed that the number of female respondents (51.7%) is slightly larger than male (48.3%) respondents. By age, majority of the participants were 18 years of age (94.9%) compared to 17 years of age (5.1%). In term of place of residence, 56.4% of the respondents resided in rural areas and this figure is also greater than those living in the urban areas (43.6%). Meanwhile, for ethnic group, majority of the respondents were Malays (77.2%), followed by Chinese (19.7%), Indians (2.4%) and other races (0.7%).

The objective was to examine the socio-demographic variables (age, gender and place of residence) in developing team cohesion. As presented in Table 2, the effects of

different respondents' age groups towards development of team cohesion were studied. Data between two different age groups was analyzed using two-sample t-test (independent t-test). The results (pre-test) indicated that the mean scores of the pre-test according to age in group of 17 years old ($M=2.46$, $SD=.608$) was lower than those of the 18 years old group ($M=2.52$, $SD=.492$). The result indicated that there was no significant difference in the scores of the pre-test between age, $p>0.05$ ($P=.075$). Thus, the perception towards cohesiveness among participants at 17 and 18 years old did not differ. As for the gender variable, the males scored ($M=2.70$, $SD=.588$) which was higher compared to the females ($M=2.28$, $SD=.512$). The analysis also indicated that there was a significant difference in the mean score during the pre-test according to gender, $p<0.05$ ($P=.001^*$). This result highlighted that there was a dissimilar perception of team cohesion building between the male and female participants. Meanwhile, results showed that there was no significant difference observed for the place of residence variable. Respondents living in the urban area ($M=2.48$, $SD=.577$) disclosed similar result as that of the respondents living in the rural ($M=2.50$, $SD=.523$) in the pre-test of GEQ, $p>0.05$. Therefore, there was no dissimilarities on the perception of team cohesion among respondents' tested. .

As for the post-test (Table 2), independent t-test analysis was conducted in order to identify the differences on the scores obtained from two different age groups. The results indicated that the mean scores of the post-test according to the age group of 17 years old ($M=3.36$, $SD=.649$) were slightly lower than those of the 18 years old group ($M=3.40$, $SD=.591$). The results revealed that there was no significant difference in the mean score of the post-test between the age, $p>0.05$ ($P=.141$). Consequently, this result also showed that there were no differences on the understanding and team cohesion building among the 2 groups tested. Meanwhile, for gender variable (post-test), the males scored ($M=3.47$, $SD=.628$) which was higher than the females ($M=3.29$, $SD=.612$). There was a significant difference in the mean scores of the post-test according to gender, $p<0.05$ ($P=.001^*$). The result implied that the understanding and development of team cohesion among participants varied between male and female respondents. The results for the respondents living in the urban area ($M=3.39$, $SD=.641$) were fairly higher than those living in the rural area ($M=3.37$, $SD=.599$) for the post-test of GEQ. Analyzed results revealed that there was no significant difference in the mean cohesion score of the post-test for the respondents according to their place of residence,

$p > 0.05$ ($P = .889$). Hence, this result also indicated that the understanding and team cohesion building among participants from 2 different residencies was similar.

Collectively these quantitative results indicated that the participants of the National Service Training Programme underwent group cohesion change during the Physical Module activities (adventure-based activities) that were carried out at the camp. The changes were observable based on the statistically analysed data during the pre and post-test. These quantitative results will later be discussed in the next chapter in an attempt to gain an understanding of the participants' perspective to the efficacy to team cohesion building during the operation of physical module at the camps.

Table 1. Demographic Characteristic of Participants.

Characteristics	Frequency	
	Respondents	Percentage (%)
Camps		
Meranti	324	32.6
Tasoh	321	32.3
Guar Chenderai	349	35.1
Gender		
Male	480	48.3
Female	514	51.7
Age		
17 years old	51	5.1
18 years old	943	94.9
Place of Residence		
Urban area	433	43.6
Rural area	561	56.4

Table 2. The independent t-test of the mean differences in the mean cohesion scores of the pre and post test for the respondents according to their age, gender and place of residence.

Test Variables	Pre				Post			
	Mean	SD	t-value	P	Mean	SD	t-value	P
Age								
17	2.46	.608	1.78	.075	3.36	.649	1.47	.141
18	2.52	.492			3.40	.591		
Gender								
Male	2.70	.588	3.65	.001*	3.47	.649	5.24	.001*
Female	2.28	.512			3.29	.612		
Place of Residence								
Urban	2.48	.577	.292	.771	3.39	.641	.140	.889
Rural	2.50	.523			3.37	.599		

Significant at $p < 0.05$

Discussion and Conclusion

Many studies have shown interest in examining the effects of adventure-based activity on personal and social development (e.g. Shivers-Blackwell, 2003; William, Graham, & Baker, 2003). The literature reviews indicated that participation in the adventure-based activity module has increased over the past decades (Thapa, 2010). Therefore, to further explore the issue on the physical module activity, this study sought to examine whether the participants involved in the physical module activity process would report higher self report for team cohesiveness during their participation in the National Service Training Programme. This study attempted to unfold the effects of demographic variables (age, gender and place of residence) on team cohesion.

No significant difference between the pre and post-test mean cohesion scores between age was reported. The finding of the present study contradicted with that of the previous research (Henderson, 2001). A possible reason for this situation is the gap in age of the respondents, there was not much difference between participants at 18 and

17 years of age. The age gap is too small to consider age variable as a significant parameter to compare cohesiveness among participants at the camp. Meanwhile, Wong and Louie (2005) reported that mean for cohesion score of participant aged 18 and above was significantly higher than participants aged below 18 in the study of camp adventure programmes effects on improving self-concept of youth participants in Hong Kong. The result obtained were in contrast with the present study whereby, there was no significant difference between age on team cohesion building among participants at the National Service Training Programme since the age group of participants at the camp were only ranging from 17 to 18 years old which the age gap was too small. Therefore, there were not many differences on the perspective of all participants (by age) towards team cohesion. The present study revealed that all participants (by age) agreed on the positive improvement of team cohesion during adventure-based activity at the camps. However the change of perception during pre and post-test were too small to be significantly different from each other. The finding of another study by Henderson (2001) revealed that the camp had a positive influence on self relatively short periods of time across all age groups, particularly among groups of younger age. However, the findings obtained in the present study also suggest that the mean scores for both the age groups considerably favorable towards group cohesion.

As for gender variable, data presented in Table 2 revealed that there was a significant difference between the respondents' cohesion mean scores according to gender. The data indicated that the male respondents scored greater than their female counterparts. Nonetheless, both the genders scored favorable level and were considered as positive towards team cohesion. It is important to note that the number of male respondents was not equal to that of the females in total. The researcher has assumed that this is the most suitable explanation for the significant situation. However, it is long known that males typically handle situation by factual whilst the females are prone to handle situations emotionally. Therefore, in an assumption, there might be some situations where the female participants at the camp were involving in a certain activity and they tend to involve their participations in the group activity with high emotions. This situation could affect cohesiveness among participant and the team.

The result of the present study is in line with that of Bjerke, Thrane, and Kleiven (2006) who found that there is a weak tendency for women to be more cohesive than men. Hattie *et al.* (1997) stated that in the meta-analysis of 97 studies on the effect of adventure activity, in which they found no significant difference in the overall size of the

outcomes for the male and female respondents. Meanwhile, it is well recognized that boy may benefit more from physical challenges assuming that they are more interested in such challenging activities. On the effects of camp adventure programmes on improving self-concept of youth participants in Hong Kong, Wong and Louie (2005) reported that, mean for cohesion score for male participants was not significantly different from female participants. This result was contradictory to the present study.

According to the data presented for the place of residence in Table 2, the results revealed that there were no significant differences in the mean cohesion scores of the pre and post-test for the respondents view according to the respondents' place of residence. However, the scores by the respondents from both the groups (rural and urban) were almost similar. This finding showed that the respondents in both groups have the same thoughts and acceptance towards group cohesion. The analyzed data showed that cohesiveness among participants from both places of residence were favorable. The findings of the present study are similar to those of Huddart-Kennedy, Beckley, McFarlane, and Nadeau, (2009) who suggested that there were more similarities than differences between the rural and urban residents on adventure-based activity. The possible explanation for this, based on the researcher's opinion, is due to the "turn around phenomena" as mentioned by Smith *et al.* (1981, cited in Imig, 1983). The researcher further explained that the "turn around phenomena" of the past decade has changed the rural scene. There is no longer synonymous in the concept of rural and farm. This is supported by Shepard and Speelmans (1986) who measured the impact of participating in an adventure programme on children aged 9 to 14 years at resident 4-H camps in Ohio. Their study recommended that the participants living in both, urban and rural areas received the same initial period of acclimation to the adventure-based activity performed.

In general, the aim to examine the socio-demographic variables (age, gender and place of residence) in influencing team cohesion was achieved. Cohesiveness was encountered among participants during post-test. However, only gender variable showed significant differences during pre and post-test. The other two, age and place of residence did not reveal any significant differences. Yet, there was a slight increase in mean scores of both age and place of residence variable towards team cohesion during post-test. Hence, cohesiveness among participants was in a way, developed and the aim of the present study to discover team cohesion building among participants at the

National Service Training Programme at 3 different camps (Tasoh, Guar Chenderai, Meranti) in Perlis, Malaysia was achieved.

References

- Aboody, D., M.E., Barth, and R., Kasznik, 1999. "Revaluations of Fixed Assets and Future Firm Performance: Evidence From The UK", *Journal of Accounting and Economics* 26, 149-178.
- Alien-Craig, S., & Miller, J. (2007). Can outdoor educators make a difference ? The effect of outdoor educators on achieving program outcomes. *Healthy Lifestyles Journal*, 54(2), 112-116.
- Alp, E., Ertepinar, H., Tekkaya, C., & Yilmaz, A. (2006). A study on children's environmental knowledge and attitudes: The effect of grade level and gender. *International Research in Geographical and Environmental Education Research*, 15, 156-160.
- Altman, S. R., Estes, C., & Tittle, F. (2006). Sexual orientation and team cohesion in women's intercollegiate basketball *Larnet: The Cyber Journal of Applied Leisure and Recreation Research*, 1, 56-60.
- Beauchamp, M.R., Bray, S.R., Eys, M.A., & Carron, A.V. (2005). Leadership behaviors and multidimensional role ambiguity perceptions in teams sports. *Small Group Research*, 36, 5-20.
- Berg, K. E., & Latin, R. W. (2004). *Essentials of research methods in health, physical education, exercise science, and recreation* (2 ed.). Baltimore: Lippincott Williams & Wilkins.
- Bogner, F. X. (2002). The influence of a residential outdoor education programme to pupil's environmental perception. *European Journal of Psychology of Education*, 17(1), 78-85.
- Bjerke, T., Thrane, C., & Kleiven, J. (2006). Outdoor recreation interests and environmental attitudes in Norway. *Managing Leisure*, 11(1), 116-128.
- Buttel, F. H. (1992). Environmentalization: Origins, processes, and implications for rural social change. *Rural Sociology*, 57(1), 25-33.
- Baumgartner, T. A., & Hensley, L. D. (2006). *Conducting and reading research in health and performance* (4 ed.). New York: McGraw Hill.
- Bjerke, T., Thrane, C., & Kleiven, J. (2006). Outdoor recreation interests and environmental attitudes in Norway. *Managing Leisure*, 11(1), 116-128.

- Connelly, D. (1992). The benchwarmer. *Sport Psychology Training Bulletin for athletes, Coaches & Parents*, 4, 1-8.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed methods approaches* (Second ed.). California: Sage Publication, Inc.
- Campbell, D. T., Hanna, J. M., Tice, A. L., & Meyer, B. B. (2000). *Examining the effect of repeated exposure to a ropes course intervention: Methodological considerations*. Paper presented at the Student Scientific Research Symposium, University of Wisconsin.
- Carron, A. V., Bray, S. R., & Eys, M. A. (2002). Team cohesion and team success in sport. *Journal of Sport Science*, 20, 119-126.
- Chang, A., & Bordia, P. (2006). A multi-dimensional approach to the group cohesion - group performance relationship. *Small Group Research*, 37(4), 78-85.
- Eys, M. A., Carron, A. V., Bray, S. R., & Beauchamp, M. R. (2003). Role ambiguity and athlete satisfaction. *Journal of Sport Sciences*, 21, 391-401.
- Greenfield, C. (2004). 'Can run, play on bike, jump the zoom slide, and play on the swing': exploring the value of outdoor play. Paper presented at the Kidsafe National Playground Conference, Sydney.
- Granito, V. J., & Rainey, D. W. (1988). Differences in cohesion between high school and college football teams and between starters and nonstarters. *Perceptual and Motor Skills*, 66, 471-477.
- Gruber, J. J., & Gray, G. R. (1982). Responses to forces influencing cohesion as a function of player status and level of male varsity basketball competition. *Research Quarterly*, 53, 27-36.
- Garst, B., Scheider, I., & Baker, D. (2001). Outdoor adventure program participation impacts on adolescents self-perception. *The Journal of Experiential Education*, 24(1), 41-50.
- Henderson, K. A. (2001). Camping gives kids an endless world of good. *Parks & Recreation*, 36(11), 56-64.
- Hattie, J., Marsh, H. W., Neill, J. T., & Richards, G. E. (1997). Adventure education and Outward Bound: Out-of-class experiences that make a lasting difference. *Review of Educational Research*, 67(1), 43-87.

- Heuz'e, J. P., Raimbault, N., & Fontayne, P. (2006). Relationships between cohesion, collective efficacy, and performance in professional basketball teams: An examination of mediating effects. *Journal of Sports Sciences*, 24, 59–68.
- Huddart-Kennedy, E., Beckley, T. M., McFarlane, B. L., & Nadeau, S. (2009). Rural-urban differences in environmental concern in Canada. *Rural Sociology*, 74(3), 41-49.
- Imig, D. R. (1983). Urban and rural families: A comparative study of the impact of stress on family interaction. *Rural Education*, 1(2), 74-83.
- Jacob-Johnson, C. S. (2004). Status in sport teams: Myth or reality? *International Sports Journal*, 8: 55-64.
- Klasen, M.J. (2010). Contactedness to Nature: Comparing Rural and Urban Youth's Relationship with Nature. MA Thesis. Royal Roads University, Canada.
- Kamphoff, C. S., Gill, D. L., & Huddleston, S. (2005). Jealousy in sport: Exploring jealousy's relationship to cohesion. *Journal of Applied Sport Psychology*, 17, 211-220.
- Leupp, A. (2007). Gendered wilderness: The effect of outdoor education on girls' and boys' self-concept. *An Undergraduate Research Journal*, 2(1), 88-95.
- Mcnamara, D. N. (2002). Adventure-based programming: Analysis of therapeutic benefits with children of abuse and neglect. Unpublished Phd Dissertation, University of South Carolina.
- Mugford, A. L., & Tennant, L. K. (2005). Flow in a team sport setting: Does cohesion matter? Unpublished Research. University of Kansas.
- Mohai, P. (1992). Men, women and the environment: An examination of the gender gap in environmental concern and activism. *Society and Natural Resources*, 5, 1-19.
- Riemer, H.A. & Chelladurai, P. (1998). Development of the Athlete Satisfaction Questionnaire (ASQ). *Journal of Sport and Exercise Psychology*, 20: 127-156.
- Stoddart, F. (2004). *Developing social capital through outdoor education in Cumbria: A case study*. Paper presented at the Outdoor Education International Research Conference.
- Shepard, C. L., & Speelman, L. R. (1986). Affecting Environmental Attitudes Through Outdoor Education. *Journal of Environmental Education*, 17(2), 212-222.
- Sheard, M., & Golby, J. (2006). The efficacy of an outdoor adventure education curriculum on selected aspects of positive psychological development. *Journal of Experiential Education*, 29(2), 44-53.

- Shivers-Blackwell, S.L. (2003). Reactions to Outdoor Team building initiatives in MBA education. *Journal of Management Development*, 23(7), 614-630.
- Tuckman, Bruce W. (1965). Development sequence in small groups. *Psychological Bulletin*, 63(6), 384-399.
- Thapa, K. (2010). Autism: Understanding the enigma. In P.N. Tandon, R.C. Tripathi & N. Srinivasan (Eds.), *Expanding horizons of the mind Sciences*, New York: Nova Science.
- Widmeyer, W.N., Brawley, L.R., & Carron, A.V. (1985). *The measurement of cohesion in sport teams: The group environment questionnaire*. London. Ontario: Sports Dynamics.
- William, S. D., Graham, T. S., & Baker, B. (2003). Evaluating outdoor experiential training for leadership and team building. *Journal of Management Development*, 22(1), 45-49.
- Wong, E.W., & Louie, L.H. (2005). The effects of camp adventure programs on improving self-concept of youth participants in Hong Kong. *Journal of Physical Education and Recreation (Hong Kong)*, 12(1), 7-33.