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Enhancing Social Support through Adventure Education: The Case of Fathers and Sons

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Abstract

Adventure education (AE) research often utilizes social support as an outcome variable associated with participation in extended outdoor adventure trips. Social support is defined as “the degree to which individuals have access to social resources, in the form of relationships, on which they can rely” (Johnson & Sarason, 1979). Using an adventure-based program offering a treatment specifically designed for father and son participants, significant changes in pre-post comparison scores on the variables of trust, communication, and social support were reported for both fathers and sons. Qualitative analysis revealed four major themes: communication enhancement, instructor influence, course components, and shared time. Based on these results, AE programming can be effective in increasing social support between fathers and sons, enabling them both to learn valuable life lessons about father-son interactions and communication benefits.

Keywords: *father/son relationships, social support, adventure education*

Introduction

Adventure education (AE) is thought to enrich relationships and increase social support (Priest, 1986). Through shared experiences, accomplishments, and collective challenges, AE programs encourage personal growth and development while students are actively engaged in small group activities (Ewert & Heywood, 1991). These small groups are a cornerstone of many AE programs (Hattie, Marsh, Neill, & Richards, 1997) as they often provide the medium through which other desired outcomes are achieved (McKenzie, 2000). For example, Ewert and Heywood (1991) found that through these experiences, significant relationships are formed, which lead to warmth, familiarity, and closeness among AE participants.

This study focused on students participating in a five-day adventure program in the Sierra Nevada range of California. The father-son pairs arrived at a staging area and were outfitted with proper equipment and assigned into smaller patrols of 12. These patrols were accompanied by two instructors and remained in independent groups for the duration of the course. The students engaged in a series of activities common to many outdoor programs including climbing, rappelling, hiking, and duo (a variation of the concept of solo). The students were subjected to facilitated discussion throughout the treatment, focusing on the themes and ideas related to communication and enhancing the father-son relationships.

For the purposes of this study, social support was delineated into three measurable constructs: trust, communication, and relationship quality (Ommen et al., 2008). Multiple studies have shown that these three variables can be effective indicators of social support (Cutrona, 1996; Kirmeyer & Lin, 1987; Richman, Rosenfeld, & Bowen, 1998). The major focus of this study was to identify and measure the development of social support between fathers and sons who participated in the five-day AE program. Social support has been defined as “the degree to which individuals have access to social resources, in the form of relationships, on which they can rely” (Johnson & Sarason, 1979). It was theorized by the researchers that given the support often provided in the AE situation, both between participants and from the instructors, the father-son relationship should provide an insightful study scenario, in particular because the father-son pair already bring into the course a pre-existing relationship. Thus, it was believed by the researchers that the findings from this study may be illustrative in providing inferences that could be made to other populations such as those that could be found on standard AE courses where the students have no prior knowledge of one another.

The Social Development Model (SDM) was used as the theoretical framework for this study (Catalano & Hawkins, 1996). The SDM suggests that problem solving and interpersonal behaviors are increased by positive avenues for communication. Additionally, it suggests that positive behaviors are reinforced for a person who feels a connection to the social group with which they are engaged. This bonding helps encourage norms and behaviors desired by the larger group, which in this scenario, is the AE patrol and the partner with whom they are sharing the experience. The primary goal of the examined AE program is to alter the father-son dynamic, enhancing trust, communication, and relationship quality, thus increasing social support. The SDM provides a framework that shows that individuals develop social support by engaging in inclusive, pro-social behaviors, while also providing positive feedback. Furthermore, it has been suggested that the SDM is relevant in leisure settings and could be an ideal place to address interpersonal issues such as enhancing social support (Duerden & Witt, 2010). Trust is a key component for maintaining healthy relationships and personalities (Erikson, 1953). Multiple studies have also shown that participation in AE programming can increase interpersonal trust among students (Anheier & Kendall, 2002; Hattie et al., 1997). The development of trust is indeed essential to groups in AE programming because it leads to harmonious, cooperative behavior (Mayer, Davis, & Schoorman, 1995). Trust is built among students on these AE courses through collaborative challenges, facilitated discussions, and by the student’s disposition to disclose sensitive information with other group members.

Communication is another cornerstone of an AE program and student experience. Communication, defined as the act of information exchanged from one person to another (Bienvenu Sr, 1969), has been found to be a major factor in cohesion and group development, particularly in family units (H. Johnson, Lavoie, & Mahoney, 2000). Jourard (1971) identified “information disclosure” and

“sensitivity” as important facets of communication. Students in AE programs often disclose sensitive information, including troubles and personal challenges experienced at home and drug or self-harm issues (Hattie et al., 1997).

The social development model (SDM) suggests that AE courses may be highly effective settings to increase relationship quality among fathers and sons (Ommen et al., 2008). AE courses are structured as safe environments where sensitive and trust-dependent types of information may be safely disclosed. This environment, which is facilitated by the instructional staff, creates forums in which this information disclosure may happen. Relationship quality is an important component in the father-son dynamic because it has been linked to affective reactions, forgiveness, and emotional empathy (Fincham, Paleari, & Regalia, 2002). All of these attributes can be construed as important components of a healthy relationship between fathers and sons.

By placing AE programming in the context of the SDM, AE can be examined in different contexts, providing new understandings as to how it impacts the development of social support, interpersonal trust, and communication. Through the environment provided by AE, healthy social bonds may be enhanced, enabling participants to have deeper, more meaningful relationships.

Methods

This study used a mixed-methods approach. The quantitative portion included a 72-item, Likert-scale instrument, adapted from previous studies, to examine social support among father-son AE participants. The qualitative instrumentation included participant observation during the course, as well as semi-structured, post-course interviews conducted two months after the course.

Sample

The scope of this study included 13 pairs (N=25) including, 17 fathers and eight sons. The discrepancy between number of fathers and sons comes from the inclusion of fathers who came to the program with daughters. Based on the literature review for fatherhood, it was determined by the researchers that these fathers who were accompanied by their daughters had a similar enough experience to the fathers with sons to be included in the analysis of the data (Lamb, 2004). Similarly, the program is specifically designed and implemented with father-son dyads in mind and only recently have father-daughter pairs become more common with this program. Because of this historical context and the expectation that the program would be male dominated, the study only focuses on the father-son dyads. Additionally, the relationship quality instrument chosen for this study focused only on father-son relationships.

Instruments – Quantitative

The quantitative instrument consisted of four preexisting instruments. The first instrument, the *Measurement of Parent-Adolescent Communication* developed by Bienvenu (1969), was designed to assess communication between parents and adolescents ($\alpha = .88$). The second, the *Parent-Child Communication Instrument* developed by Loeber et al. (2002), was also designed to capture communication levels between parents and their children (reliability scores unavailable). These two communication instruments were chosen to capture slightly different aspects of parent-adolescent communication. The third quantitative instrument was developed from Katz (2002) to record changes in “relationship quality” between fathers and sons (reliability scores not available). The fourth

quantitative instrument was designed to capture levels of trust between father-son dyads, adapted from Johnson-George and Swap (1982) ($\alpha = .83$).

Because the variables associated with social support in this study were somewhat subjective and prone to response-shift bias, a retrospective pretest format was incorporated into the data collection process (Hill & Betz, 2005; Pratt, McGuigan, & Katzev, 2000). The quantitative portion of the instruments was administered the final morning of the course.

Instruments - Qualitative

The first section of the qualitative instrument included a participant-observation guide. The guide was created based on existing literature about how social support might be developed among AE students as well as the researchers' past experience with this population. For example, in previous courses it was observed that participants often disclose highly sensitive information. The participant-observation guide was designed to allow the researchers to record at what times this information was exchanged. Observations and commonalities were recorded using the observation guide and later analyzed in concert with the other qualitative data.

The second section of the qualitative instrument utilized participant interviews two months after the course's completion. These interviews were grounded by a semi-structured interview guide. Commonalities and emergent themes were recorded and subsequently weighed based on the number of times they emerged and the depth at which the interviewee spent on that particular theme. Naturalistic inquiry (Lincoln & Guba, 1985) was utilized to identify and analyze these themes, which are presented in the results section.

An additional instrument was created during the implementation of this study to capture the thoughts of the instructors who facilitated these courses. These instructors are specifically trained in facilitating discussion, observing participant growth, and implementing the course components. The researchers believed that the instructors possess particularly meaningful insights into this course because they have seen multiple courses and numerous father and son pairs. This instrument was therefore used to capture the patterns, similarities, and differences that instructors may have noticed during their time working similar courses. It was also applied in identifying various significant moments in the courses while attempting to quantify the effectiveness of different course components. Specifically, this instrument was designed to capture the perceptions of the AE staff on a variety of course components and the effect they have on the development of social support between fathers and sons. This instrument asked each instructor (N=7) to rate that course component on a 7-point Likert scale.

Results

Quantitative Results

The quantitative instrument was analyzed using a paired-sample *t* test to measure change from before and after participation in the AE program. Two paired-sample *t* tests were used per variable, one for fathers and one for sons, to analyze change in each of the variables, trust, communication, and relationship quality (Table 1). An additional paired-sample *t* test was used when all the variables were combined to obtain a score for "social support" (Mee & Chua, 1991). The results of this analysis are displayed in Table 1.

As can be seen in Table 1, and using an alpha of .05, significant differences were noted in all but two of the comparisons. Interestingly, the two non-significant comparisons of the retrospective pre and post scores were reported by the sons. This finding suggests that (a) the AE experience was less effective in eliciting a sense of social support through communication or relationship quality for the sons or (b) the sons were less able, then their fathers, to be able to cognitively articulate any changes they experienced. In addition, using Cohen's small, medium and large delineations for effect size (Ellis, 2010), some interesting findings resulted. While most of the effect sizes center around a small to medium classification, one, involving the sons and social support, generated a .50 (large) effect size, thus suggesting that there may be a differential effect on sons engaging in the AE and their sense of increased social support from the experience.

Table 1
Changes in Social Support

	<i>N</i>	<i>SD</i>	Pre- test MS	Post- Test MS	<i>t</i> score	Significance	Effect Size
Trust							
Fathers	15	.66	6.6	7.4	4.8	<.01	.26
Sons	7	.32	7.5	7.9	3.51	.01	.37
Communication							
Fathers	17	.3	4.2	4.8	7.9	<.01	.33
Sons	8	1	4.4	5.1	1.96	.09	.22
Relationship Quality							
Fathers	18	.44	3.8	4.3	6.4	<.01	.27
Sons	9	.78	4.2	4.7	2.2	.06	.22
Social Support							
Fathers	15	.31	4.3	4.9	7.27	<.01	.34
Sons	5	.24	5	5.4	4.04	.02	.50

Note: The following scores were used for evaluating the effect sizes; .01 = small effect size, .06 = moderate effect size, and .14 = large effect size (Pallant, 2010).

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Qualitative Results

Thematic analysis was used in the interpretation of the qualitative data, and naturalistic inquiry was used for analyzing the qualitative data (Lincoln & Guba, 1985). Major themes, reoccurring ideas, and topics were assessed and analyzed. These patterns were coded and additional interviews were then conducted to gather more information about these topics.

From the student interviews, 19 themes consistently emerged. The magnitude of these variables was determined by the number of times they emerged as well as the amount of time spent discussing that topic. The variables were then coded and organized based on their determined magnitude. The reoccurring themes in order of magnitude were (a) intentional time, (b) facilitated time, (c) rappelling, (d) deeper levels of disclosure, (e) relationship gauging, (f) climbing, (g) partner discovery, (h) interpersonal issue expression, (h) escape from everyday life, (i) distraction free time, (j) belaying while rock climbing, (k) communication assessment, (l) instructor influence, (m) duo, (n) swimming, (o) pertinent topic breeching, (p) peer interaction time, (q) affirmations, and (r) blessing.

Major Themes

The 19 variables were divided into groups based on their relationship to one another and by the process of how they contributed to the development of social support between fathers and sons. The themes are as follows:

Shared Time

The findings suggest that spending time together, free from distractions of everyday life, contributed significantly to the development of the father-son pairs' relationships. Being presented with a common challenge to overcome with a partner was mentioned by several interviewees. This led to rich discussions and gave participants a historical event in their relationship that they could often discuss and reminisce upon. This theme also includes the idea that the fathers and sons perceive value in spending one-on-one time with one another free from the distractions of other family members.

Course Components

Subjects in this study listed, in order of magnitude, are rappelling, climbing, swimming, and duo (based on the idea of solo) as the components that most contributed to the enhancement of social support. Addressing why rappelling was the most significant course component in qualitative interviews, subjects expressed high anxiety and "extended facilitation" as particularly significant. This "extended facilitation" can be classified as an activity where instructors are present for the major events, making the event easier to facilitate because central themes and observations can be recorded and discussed afterwards by the instructional staff having actually observed the activity. The researchers suspect that the effectiveness of this component directly correlates with its high level of intensity.

Institutional Influence

The issue of “institutional influence” emerged from the interviews at numerous times. Institutional influence is the impact the programming has upon the participants, especially the instructor-facilitation components. Adventure education instructors are highly trained to incorporate facilitation techniques, guide discussion, and encourage participants to be vulnerable or open with their partner. Without these facilitators, the course would still provide shared time and activities, but it would be more difficult to make or express the connections between adventure education and social support in the context of interpersonal development.

Communication Enhancement

The qualitative interviews indicated that the AE course provided some level of participant awareness of communication between fathers and sons. The courses were structured to increase the communication between fathers and sons in particular and to help teach and facilitate communication between the pairs. For example, prior to the experience, a discussion guide was given to the fathers and sons to be used while participating in the duo experience to make it easier to start conversations and ask pertinent questions. The discussion guide includes conversational prompts, such as a list of questions to ask your partner, which get progressively more personal as you proceed through the questions.

The subjects also expressed a sense of discovery about their partner. They communicated that the course allowed them to show a different side of themselves to their partner rather than just their roles as fathers or sons. Subjects said they were able to disclose “deeper” levels of information that would have normally been difficult to express. For example, one father remarked that the duo experience was the first time he had talked about his divorce from his son’s mother. These types of moments may lead to easier communication in the future by creating avenues or settings that may be comfortable for fathers and sons to use in addressing delicate issues.

Table 2
Instructor efficacy ratings of course components

	<i>N</i>	Ranking	Range	Sum	<i>M</i>	<i>SD</i>
Duo	7	1	1	48	6.9	.38
Rappelling	7	2,3	2	42	6.0	.58
Other (assortment of activities)	5	2,3	3	30	6.0	1.23
Rock Climbing	7	4	2	39	5.6	.79
Evening Meetings	7	5	4	35	5.0	1.29
Course Rituals	7	6	5	33	4.7	1.98
Devotional Time	7	7	3.0	32.5	4.6	1.18
Roundtable	4	8	1.5	17.5	4.4	.75
Swimming	4	9	1	15	3.8	.50

N=7

*Devotional time is an activity for discussions about faith and Christianity.

The qualitative information obtained from the interviews revealed several themes and major information that supplements the research project. The interviews confirmed the themes emphasized by the empirical data gathered. For example, the sons participating in the course reported that they appreciated “time spent communicating with their father” and that they “disclosed information they had not previously discussed with their father.” This suggests that levels of communication were in fact increased while they participated in the program. The interviews also provided some additional insight into other phenomenon possibly occurring while participating in AE courses such as these. Five themes were established to categorize major areas of emphasis among the research subjects. These themes will be useful for supplementing the empirical findings as well as applying the findings of this research project in other contexts.

Analysis of the Instructor Instrument

The instrument consisted of seven Likert-scale items that asked the instructional staff to rate each course component from one to seven based on how much they perceived that element contributed to the development of social support between fathers and sons (Table 2). The following section includes a breakdown of each course element and its effectiveness:

The findings confirm the order of importance placed on each course component by the students and the instructors. However, the order of importance differs between instructors and students (see Table 3).

Table 3
Contribution of the top 3 course components to enhancing social support as ranked by instructors and students

Instructors	Father-son dyads
1. Duo	1. Rock Climbing
2. Rappelling	2. Duo
3. Other (assortment of activities such as day hiking)	3. Rappelling

This may be the result of a difference in perceptions. For example, students may naturally tend to list the more exciting activities as more effective solely because they are more fun or appealing. It is likely that the instructors rating may be based on post-activity discussions where rich conversations occur from the previous activity. In any case, the findings confirm the importance of the top three activities and may aide practitioners in addressing which components to focus on for enhancing the father-son relationship.

Summary of the Results

Although the study used a small sample size, a large quantity of data was still able to be collected. From this data, conclusions were drawn regarding the development of trust, relationship quality, and communication between fathers and sons participating in an AE program. It was found that students in AE programming experienced increases in trust, communication, relationship quality, and social support. Additionally, further insight was gained into specific outcomes of these courses, including how those outcomes were achieved and through which course components.

The quantitative analysis revealed several themes that were important in understanding how social support was enhanced. Through shared time, instructor influence, and course components, relationships were strengthened between fathers and sons, which led to improved relationships and enhanced perceptions of social support. Additional information revealed that of all the course components that were examined, duo and rappelling had the greatest impact on the father-son dyads. Due to the small sample size in this study and similar small group research, the provider of this and similar AE programs should continue to use the quantitative instrument to gather additional data to support these findings.

Discussion

Although small groups and intimate relationships are an essential component in many AE experiences, these have been largely ignored by current research. It is the social bonds formed on AE courses that provide a safe environment in which to simulate leadership, give and receive feedback, and provide a social support structure for difficult physical and emotional challenges. These relationships are a fundamental part of the AE experience and learning process because they create an avenue in which students can feel safe, learn interpersonal skills, and experience personal growth.

Without high levels of social support, it is unlikely that students can achieve the same levels of personal growth. Strong bonds and a high perception of social support are the conduits in which the Social Development Model (SDM) is relevant on AE courses. For example, a student is much more likely to give feedback to another student with whom he or she has established a close, intimate relationship. As the SDM proposes, this type of feedback is part of what contributes to increases in positive behaviors among AE students after their experience (Catalano & Hawkins, 1996).

This research is beneficial for AE practitioners and professionals on many levels. First, it provides insight into how social support is enhanced on AE courses. This is relevant to practitioners because they can use that information to enhance social support among groups and achieve successful program outcomes. Second, it provides a unique niche for AE programming to fill by the promise that it can build cohesion amongst people. This may be beneficial for anyone trying to strengthen a group such as a family, or individual members of a family.

It is also useful to better understand how specific course components may contribute to the development of social support between pairs. This information may prove useful to practitioners hoping to create social bonds between students – fathers and sons in particular – by providing information about which components are the most effective in reaching program goals. However, it should be noted that there were differences in how the participants ranked the course components and how the instructors ranked them.

Future research should examine differences in outcomes between groups with different levels of cohesion. Through this, the magnitude that social support plays in selected outcomes could be determined. Additionally, such a study could also investigate how various levels of social support make a difference in students' experiences. Further inquiries should also be made regarding how long-lasting the social support system is in place after participating in the AE program.

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