

Outdoor Leaders' Emotional Intelligence and Transformational Leadership

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This study explored the concept of outdoor leadership from the perspectives of emotional intelligence and transformational leadership. Levels of emotional intelligence, multifactor leadership, outdoor experience, and social desirability were examined using 46 individuals designated as outdoor leaders. The results revealed a number of unique characteristics of outdoor leaders' emotional intelligence and leadership, including contributions of past outdoor experience to the development of emotional intelligence as well as transformational leadership. In addition, there was a moderate and positive relationship between emotional intelligence and transformational leadership.

Keywords: Outdoor Leadership, Emotional Intelligence, Transformational Leadership

Outdoor leadership is an area within experiential education that involves purposefully taking individuals/groups into the outdoors for: recreation or education; teaching skills; problem-solving; ensuring group/individual safety; judgment making; and facilitating the philosophical ethical, and esthetic growth of participants (Ewert, 1983). It includes: helping the individual or group identify goals and objectives; utilizing specific action to achieve those goals; creating the opportunities for learning; and training new or less experienced outdoor instructors and leaders (Ewert, 1989). Outdoor leadership often takes place in an expeditionary learning setting using experiential education methods for the attainment of educational goals. In addition, outdoor leadership involves a wide range of competencies and has been researched from a variety of perspectives including ethical concerns (Fox, McAvoy, Mullins, Robinson, & Ryan, 2004), international perspectives (Priest, 1989), and personality types (Easley, 1985). This study explores outdoor leadership from the perspectives of emotional intelligence and transformational leadership.

According to Salovey and Mayer (1990), emotional intelligence refers to "the subset of social intelligence that involves the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p.189). Bass (1985) defined the transformational leader as one who arouses awareness and interest in the group or organization, increases the confidence of individuals or groups, and attempts to move the concerns of subordinates to higher levels of achievement and growth. While emotional intelligence and transformational leadership have received much attention as essential components of leadership in the fields of business and education (e.g., Goleman, Boyatzis, & McKee, 2002; Haskett, 2002; Mayer & Caruso, 2002), little research on the concept has been done in the area of outdoor leadership.

Emotional Intelligence

Emotional intelligence has become an increasingly visible construct for identifying potentially effective leaders and for developing effective leadership skills (Palmer, Walls, Burgess, & Stough, 2001). Not surprisingly, the conceptual origins of emotional intelligence can be found in

intelligence theories. Thorndike (1920) suggested that social ability was an important component of intelligence and characterized social intelligence as comprising the abilities to understand others and to act or behave wisely in relation to others. Gardner's (1993) theory of multiple intelligences includes interpersonal intelligence and intrapersonal intelligence. In this case, interpersonal intelligence is defined as understanding others and acting on that understanding. Intrapersonal intelligence, on the other hand, is the ability to understand oneself-to know how one feels about things, to understand one's range of emotions, to have insights about why one acts the way one does, and to behave in ways that are appropriate to one's needs, goals, and abilities. Interest in the concept of interpersonal and intrapersonal intelligence is seen in emerging research on emotional intelligence (e.g., Bar-On, 1997; Salovey & Mayer, 1990).

Another important construct that influenced forming the concept of emotional intelligence is alexithymia, which refers to the disturbance of emotional expression (Apfel & Sifneos, 1979). It results from a lack of emotional self-awareness and an inability to display appropriate emotional expressions, both of which are essential components of emotional intelligence (Bar-On, 1997).

Numerous studies done on emotional intelligence in the fields of business and education have found positive correlations between aspects of emotional intelligence and leadership (Sosik & Megerian, 1999). In addition, emotional intelligence has often been a strong predictor variable of transformational leadership, self-efficacy, and spirituality (Hartsfield, 2003), as well as a predictor of life satisfaction (Ciarrochi, Chan, & Capti, 2000), and academic success (Parker et al., 2004). Because of the results of these studies, emotional intelligence has become recognized as one of the leading indicators of life success (Boyatzis, Goleman, & Rhee, 2000).

Emotional Intelligence and Outdoor Leadership

According to Feldman (1999), emotional intelligence consists of core skills and higher order skills. Core skills include knowing oneself, maintaining control, perceiving others accurately, and communicating with flexibility. Conversely, higher order skills include taking responsibility, generating choices, embracing a vision, having courage, and demonstrating resolve. A combination of core and higher order skills can often lead to effective leadership, possibly because these indicate an awareness of others' needs and the ability to respond effectively to a variety of situations.

In a similar fashion, Priest (1999) categorized the competencies of outdoor leadership into three types of skills: a) hard skills (often referred to as technical skills), including activity-specific skills, safety skills, and environmental skills; b) soft skills (often referred to as interpersonal skills), including instructional skills and organizational skills; and c) meta skills, which involve problem-solving, decision-making, and judgment skills. Considering Feldman's theory of emotional intelligence as a combination of core and higher order skills, and Priest's three categories of outdoor leadership competencies, emotional intelligence could be considered an important component of meta skills in helping outdoor leaders use existing skills more effectively in order to deal with situations involving both individuals and groups.

Since the 1990s, research in outdoor leadership has also focused on interpersonal and meta skills, such as communication skills (Chase & Priest, 1990), judgment (Clement, 1996; Teeters, 1994), and decisionmaking abilities (Galloway, 2003). While these studies have examined the social and situational components in outdoor leadership, the intrapersonal or emotional components of outdoor leadership have received less attention. Because the concept of emotional intelligence

includes intrapersonal, interpersonal, and situational components, it is reasonable to expect a positive relationship between emotional intelligence and outdoor leadership.

Transformational Leadership and Outdoor Leadership

Burns (1978) proposed that the leadership process occurs in one of two ways: either transactional or transformational. Within the large spectrum of literature regarding leadership, transformational leadership has attracted a great deal of empirical scrutiny (Bass & Avolio, 1997), with most of this research focusing on either its nature or its effects (Barling, Slater, & Kelloway, 2000). Burns described transactional leaders as emphasizing work standards, assignments, and task-oriented goals. Conversely, transformational leaders focus on raising employees' consciousness levels about the importance and value of designated outcomes and ways of achieving them. Thus, transformational leaders strive to motivate followers to achieve beyond what was originally thought possible (Sivanathan & Fekken, 2002).

Bass and Avolio (1997) proposed a model of the relationship between transformational and transactional leadership, suggesting that transformational leadership augments transactional leadership in impacting a student's level of satisfaction and other outcomes through five factors: a) idealized influence (behavior); b) idealized influence (attributed); c) inspirational motivation; d) intellectual stimulation; and e) individual consideration.

Along similar lines, Russell (2005) classified four theoretical leadership approaches, including the trait approach, the behavior approach, the situational approach, and the reciprocal approach. The trait approach includes the earliest research studies into the nature of leadership and suggests that there are certain inherent interpersonal qualities, or traits, that are essential for effective leadership. One early attempt at scientifically identifying the most effective leader behaviors was examined by Lewin, Lippitt, and White (1939), and focused on three leader behaviors: autocratic; democratic; and laissez-faire. According to the situational approach proponents, universally important traits and behaviors don't statically exist; rather, effective leadership varies from situation to situation. Finally, a more recent approach, the reciprocal approach, emphasizes the mutual goals and motivations of both leaders and followers. There is also a renewed recognition of the importance of leader traits and behaviors, something ignored by the situational theories.

While the trait approaches [Aguiar, 1986; Hartley, 1988; Easley, 1985; Riggins, 1986], the behavioral approach (Hartley, 1988), and the situational approaches (Attarian & Priest, 1994; Phipps, 1988) have all been conceptually related to outdoor leadership, the reciprocal approach to outdoor leadership has not been substantially researched. Because transactional/transformational leadership is an example of the reciprocal approach to leadership, examining the components of transactional/transformational leadership may enhance our understanding of outdoor leadership from this perspective.

Outdoor Leaders' Emotional Intelligence and Transformational Leadership

Bass (1990) proposed that transformational leaders must possess multiple types of intelligence, and that social and emotional intelligence are critical because they are important to the leader's ability to inspire employees/students and build relationships. Several researchers found positive relationships between emotional intelligence and transformational leadership (e.g., Barling, Slater & Kelloway, 2000; Palmer, Walls, Burgess, & Stough, 2001), thus suggesting that emotional intelligence and transformational leadership are conceptually and theoretically related to each other.

The purpose of this study is to examine outdoor leaders' emotional intelligence and leadership styles, based on transactional/transformational leadership theory. In addition, as the degree of leadership development is often a function of active participation in a variety of outdoor-related activities, (e.g., classes, workshops, personal experiences, reading, leadership responsibilities, and past outdoor-related jobs) (Propst & Koesler, 1998), outdoor leaders' levels of experience were also examined to understand the relationships with emotional intelligence and leadership.

The following research questions were examined in this study:

R¹. What is the structure of outdoor leaders' types of emotional intelligence and transformational leadership? Are their structures fundamentally different from the general population?

R². What are the relationships of levels of outdoor experience with emotional intelligence and transformational leadership?

R³. What is the relationship between the emotional intelligence of these outdoor leaders and their transformational leadership styles?

Methods

Subjects

Subjects for this study were outdoor leaders who attended the National Conference on Outdoor Leadership held at a Midwestern university in February 2004. Subjects were asked to volunteer to participate in this study if they identified themselves as outdoor leaders. The survey was completed anonymously, and demographic information such as age, gender, education, and ethnicity was solicited in addition to the study questions. In order to answer the first research question, the outdoor leader sample was compared to a general population sample along a number of variables, as discussed below.

Instruments

Subjects were asked to complete a matrix of questionnaires including: the BarOn Emotional Quotient Inventory: Short (EQi:S) (Bar-On, 2002), the Multifactor Leadership Questionnaire (MLQ 5X short) (Bass & Avolio, 1997), the Outdoor Leader Experience Use History (OLEUH) (Galloway, 2003), and the Marlowe-Crone Social Desirability Scale (MCSD) (Crowne & Marlowe, 1960).

The Emotional Quotient Inventory: Short (EQi:S) is the short version of BarOn Emotional Quotient Inventory (Bar-On, 1997), which is the most widely used measurement for emotional intelligence. The instrument consists of 51 items rated on a five-point Likert scale from 1 (very seldom, or not true of me) to 5 (very often true of me, or true of me) distributed across eight scales. Five of these scales, Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood involve the following concepts:

1. Intrapersonal: self-regard, emotional self-awareness, assertiveness, independence, and self-actualization;

2. Interpersonal: empathy, social responsibility, and interpersonal relationship;
3. Stress management: stress tolerance and impulse control;
4. Adaptability: reality-testing, flexibility and problem-solving; and
5. General mood: optimism and happiness.

Likewise, the Total Emotional Quotient (EQ) provides a summative score of the previous scales with the Positive Impression Scale and the Inconsistency Index serving as validity indicators. The Positive Impression Scale is designed to detect respondents who may be giving an exaggerated positive impression of themselves, either through self-deception, a lack of self-awareness or exaggerated self-esteem. Similarly, the Inconsistency Index identifies random or inconsistent responding that can also compromise the validity of the results. As measured through this instrument, internal consistency coefficients for the EQi:S were reported from .76 to .93, and .51 to .76 for the Positive Impression Scale in the manual. Test-retest reliabilities for the EQi:S were reported from .46 to .80.

Because age and gender differences have been reported in the measurement of emotional intelligence, the EQi:S provides both raw scores and standard scores to adjust for differences of age and gender based on the norm reference. The normative sample consists of 3,174 adults (1,543 males and 1,631 females) who range in age from 16 to 93 years, including 79% Caucasian, 8.1% Asian, 7.1% African-American, 2.8% Hispanic, 0.7% Native American and 2.3% others (Bar-On, 2002). In this study, both scores were used depending on the purposes of data analysis.

The Multifactor Leadership Questionnaire (MLQ 5X) consists of 45 items measured on a five-point Likert scale from 0 (not at all) to 4 (frequently, if not always) to assess the following leadership components: transformational leadership, transactional leadership, laissez-faire leadership, and outcome component.

The transformational leadership components include: idealized influence or attributes; idealized influence (behavior); inspirational motivation; intellectual stimulation; and individualized consideration. Transactional leadership is divided into two categories: contingent reward transactions and corrective transactions. The second category, corrective, is based on management-by-exception (active), and management-by-exception (passive) (Bass & Avolio, 1997). In management-by-exception (active), the leader monitors the group to make sure mistakes are not made and allows the status quo to exist without interfering. In the case of management-by-exception (passive), the leader intervenes only when things go wrong or a correction is needed. Outcome components include: a) satisfaction with the leader; b) individual, group, and organizational effectiveness; and c) extra effort by associates (Bass & Avolio, 1997). Reliability for all components and for each leadership scale ranged from .73 to .93.

The outdoor leader experience was measured by the Outdoor Leader Experience Use History (OLEUH), which is an empirically based, norm-referenced measure of outdoor experience assessed from both personal and professional experiences (Galloway, 2003). The personal outdoor experience scale includes four subscales: a) personal experience; b) personal environment; c) personal activity; and d) demographic information. The professional outdoor experience scale also includes four subscales: a) professional activity; b) professional environment; c) professional experience with a variety of populations; and d) professional leadership.

An individual's self-report of his/her own traits, attitudes, and behaviors may involve systematic biases that obscure accurate measurement of content variables (Paulhus, 1991). One of the most common biases is referred to as a socially desirable response (SDR). Although the EQi:S includes the Positive Impression Scale to validate self-rated answers, some research findings suggest that the self-rated answers of emotional intelligence and leadership can be influenced by SDR (e.g., Hartsfield, 2003). Accordingly, the Marlowe-Crowne Social Desirability Scale (MCSD) (Crowne & Marlowe, 1960) was included in this study in order to identify if the SDR phenomenon was occurring. The MCSD consists of 33 true-false items that describe both desirable but improbable behaviors, and those deemed undesirable but probable.

Results

Forty-eight sets of questionnaires were completely filled out by the outdoor leader sample. Following an examination of the scores using the Inconsistency Index, two questionnaires were removed from the subsequent analysis due to random response patterns identified by the Index. As a result, a total of 46 sets of data from 28 males and 18 females (aged 19 to 58, $M = 31.5$, $SD = 12.5$) were analyzed for this study. Ninety-three percent were Caucasian/white, and 7% were Asian or Hispanic. Thirty-five percent had a graduate degree (master or doctorate). A wide variance of past outdoor experiences was found.

Cronbach's alpha was used to check reliability and the following scores were obtained: .81 for EQi:S, .79 for the MLQ, .89 for OLEUT, and .77 for the MCSD. These scores revealed fairly consistent levels for the measurements used in this study.

Social Desirability

To determine possible response bias that obscures measurement of content variables from self-report instruments, the correlations between the score of MCSD and all other variables, including emotional intelligence and multifactor leadership, were examined. With the exception of the score of the stress management in emotional intelligence (standardized score) ($r = .362$, $p = .014$), no statistically significant relationships were found. As a result of this part of the analysis, it was assumed that the scores in this study were not significantly biased from a social desirability perspective.

Comparison With the General Population

Emotional intelligence. The scores of outdoor leaders' emotional intelligence were compared using t-tests with the scores of general population. In order to remove the factors of age and gender, standard scores were used in the comparison. As shown in Table 1, with the exception of adaptability, outdoor leaders' emotional intelligences were similar to those of the general population.

Multifactor leadership. The scores of outdoor leaders on the Multifactor Leadership Questionnaire (MLQ) were compared with those of the general population. Using t-tests, the results for each construct are shown in Table 2. When compared to the general population, outdoor leaders demonstrated a more transformational leadership style; on two subscales: a) the way they inspired and motivated students; and b) the level at which they considered individual student issues. Conversely, outdoor leaders tended to provide less contingent rewards for students' achievement and intervened with corrections only when absolutely necessary. In addition, they perceived their leadership as less effective for students' goal achievement, and

tended to be less actively involved in issues arising in a group compared with the general population.

Relationship to Levels of Outdoor Experience

Emotional intelligence. The relationships between outdoor leaders' scores of emotional intelligence and their levels of experience, including both personal and professional experiences, were examined. Because age and gender were significantly correlated with some components of emotional intelligence and recreation leader experience, partial correlation analyses were performed to remove these factors. As shown in Table 3, three significant correlations were found at the .05 significance level: a) the relationship between intrapersonal skills and personal outdoor experience; b) general mood and personal outdoor environment experience; and c) the total EQ (Emotional Quotient) and professional outdoor activity experience. The scores of total outdoor experience also correlated significantly with intrapersonal skills ($r = .314, p = .038$) and the total EQ ($r = .333, p = .027$).

Multifactor leadership. The relationships between outdoor leaders' scores from the Multifactor Leadership Questionnaire and their levels of experience were examined using partial correlations in order to remove the factors of age and gender. While few statistically significant correlations between each style and type of experience were found, significant relationships were found in the overall score of personal experience, professional experience, and the total amount of experience (see Table 4). The overall score of personal experiences was positively correlated with the idealized influence (behavior) ($r = .313, p = .039$), and negatively correlated with the laissez-faire leadership as a nontransactional factor ($r = -.381, p = .011$). Interestingly, the total score of professional outdoor experience was negatively correlated with the score of "satisfaction with their leadership" in the outcome factors ($r = -.382, p = .010$).

Correlations Between Emotional Intelligence and Multifactor Leadership

Table 5 shows the correlations among scores of the total EQ and the five components of emotional intelligence, as well as all components of multifactor leadership after partialling out the effects of age and gender. A number of significant correlations were found between the components of emotional intelligence and factors of transformational leadership. In particular, interpersonal skill in emotional intelligence seems to be an important element in transformational leadership. Likewise, intellectual stimulation in transformational leadership is related to many constructs of emotional intelligence. A moderately strong inverse relationship was found between the intrapersonal skill of emotional intelligence (i.e., self-regard, emotional self-awareness, and self-actualization) and a laissez-faire style of leadership.

Canonical Correlation Between Emotional Intelligence and Transformational Leadership

In order to examine the relationship between the various components of emotional intelligence and the components of transformational leadership factors, a canonical correlation analysis was performed, once again, partialling out the factors of age and gender. In terms of the assumptions for canonical correlations, the scatterplots did not show any obvious departures from linearity or homoscedasticity. Normality was tested using skewness, kurtosis and the normal distribution. SAS CANCELL was used as the statistical protocol as it protects against multicollinearity and singularity by setting a value for tolerance in the main analysis (Tabachnick & Fidell, 2001). While Pugh and Yuehluen (1991) cited a subject/variable ratio standard of 5:1 as a minimum stability level for canonical correlation analysis, Tabachnick and Fidell suggest that the ratio

should be higher; (e.g., 10 cases for every variable when the reliability is around .80). Thus, since the ratio in this study was approximately 5:1, the results and interpretations should be viewed cautiously.

The first canonical correlation was .676 (45.7% overlapping variance) ($p = .002$), and the second was .636 (40.4% overlapping variance) ($p = .04$). The approximate F values of the remaining three canonical correlations were not statistically significant ($p > .05$) (see Table 6). Accordingly, only the first two pairs of canonical functions accounted for the statistically significant relationships between the two sets of variables.

Data on the first two pairs of canonical functions appear in Table 7. There are correlations between the variables and the canonical functions, and standardized canonical function coefficients, within-set variance accounted for by the canonical function (percent of variance), and redundancies.

Using a cutoff correlation of .3 (Tabachnick & Fidell, 2001), the components of emotional intelligence correlated with the first canonical function included adaptability, stress management, and intrapersonal skills. Likewise, among the transformational leadership components, idealized influence (behavior), inspirational motivation, and intellectual stimulation were significantly correlated with the first canonical function. Therefore, the first canonical function suggests that a combination of more adaptability (.908), stress management (.433), and less intrapersonal skills (-.357) is significantly correlated with a combination of less behavior for idealized influence (-.610), more intellectual stimulation (.548), and less inspirational motivation (-.447). These data suggest that outdoor leaders' adaptability and stress management skills are highly related to intellectual stimulation.

Similarly, the correlations between the variables and the second canonical function are shown in Table 7. The second canonical function in the emotional intelligence set was composed of interpersonal and general mood, and the corresponding canonical function from the transformational leadership was composed of all components of transformational leadership, including individual consideration, intellectual stimulation, idealized influence (behavior), inspirational motivation, and idealized influence (attributed) in the order of higher correlations (see Table 7). Taken as a pair, these correlations suggest that a combination of high ratings on interpersonal (.940) and general mood (.325) categories are associated with a combination of individual consideration (.796), intellectual stimulation (.743), idealized influence (behavior) (.631), inspirational motivation (.558), and idealized influence (attributed) (.431).

Discussion

The findings of the current study provide information about characteristics of outdoor leaders in comparison with a normative or general population group, the possible contribution of specific experience to the development of emotional intelligence and transformational leadership, and the unique relationships between emotional intelligence and transformational leadership.

Comparison With the Normative Sample

Emotional intelligence. The outdoor leaders' score of adaptability suggested that they have adequate levels of emotional and social capacity to deal with everyday problems. However, this score was significantly lower than that of the normative sample. Adaptability is defined as the skill of managing change by realistically and flexibly coping with the immediate situation, as well

as effectively solving problems as they arise by reality testing, staying flexible, and using problem-solving skills (Bar-On, 2002). Not surprisingly, it was assumed that the nature of outdoor leadership tasks was different from other types of typical work situations. For example, due to safety issues, outdoor leaders are often required to follow a specific set of procedures and protocols, rather than experimenting with new approaches.

Multifactor leadership. The data suggest that outdoor leaders are associated with a more transformational-type of leadership style than was typical in the normative sample. For example, outdoor leaders had higher scores, particularly on inspirational motivation and individual consideration, than those of the normative group. Bass and Avolio (1997) characterized leaders as being able to motivate their students by providing symbolic metaphors in order to increase awareness and understanding of mutually agreed-upon goals set for both individuals and a group. Individual consideration is used by leaders not only to recognize students' needs, but also to deal with students' means of more effectively addressing their goals and challenges.

The data in this study revealed other characteristics of outdoor leaders. First, outdoor leaders in this study seemed less likely to value contingent rewards—they place less emphasis on facilitating the achievement of agreed-upon goals by students. This is not to say that outdoor leaders are uncaring about students' goal achievements, but rather that they often prefer to see students use intrinsic motivation and individual abilities to achieve goals instead of relying on outside assistance.

Second, outdoor leaders in this study were more likely to fall under the category of managing by exception than did the normative sample, suggesting that outdoor leaders do not often actively intervene to make corrections unless things go drastically wrong. These two characteristics, less contingent rewards and less active management by exception, might be reflective of the concept of experiential education, which is a major foundational background for many outdoor leaders. That is, outdoor leaders may expect students to reflect on the values of their learning process and learn from their experiences, even if these experiences were unsuccessful (Warren, Sakofs, & Hunt, 1995).

Third, outdoor leaders reported a more laissez-faire type of leadership style than the normative sample, implying they practice less intervention with issues raised in a group. This may also reflect the concept of an experiential education background. Outdoor leaders often attempt to provide opportunities for students to deal with issues by themselves, rather than providing the solution to their issues. Fourth, compared with the normative group, outdoor leaders more often saw themselves as being only one component in the overall achievement of the participants. That is, outdoor leaders recognize the existence of other factors that may influence the ability of participants to reach their goals other than their own leadership, such as the natural environment, group dynamics, and the specific learning experience.

Relationships With Levels of Outdoor Experience

Emotional intelligence. The findings suggested that the level of outdoor experience was positively related to the level of emotional intelligence. Outdoor leaders who have more overall outdoor experience reported higher levels of emotional intelligence, especially within the intrapersonal component. More specifically, outdoor leaders who have a great deal of personal outdoor experience are better at dealing with intrapersonal relationships. Finally, outdoor leaders who have taught various kinds of outdoor activities were found to have higher levels of overall emotional intelligence.

Multifactor leadership. The findings suggest that outdoor leaders who have more personal leadership experience try to influence their students in a more idealized way than did the normative sample. That is, they inspire students to set higher goals and facilitate the extra effort needed to achieve those goals. The negative correlation between the laissez-faire leadership and experience (see Table 4) implies that more experienced leaders have a higher level of willingness to become involved with students' issues and problems, and assist when needed. Interestingly, more experienced outdoor leaders reported lower levels of satisfaction with their own leadership, suggesting that experienced outdoor leaders may have higher expectations of themselves, and recognize that other factors may influence students' attaining their goals, above and beyond their personal influence as a leader.

Although correlations do not determine causal relationships, it could be deduced that increased outdoor experience contributes to the development of higher levels of emotional intelligence and transformational leadership. If true, these findings could provide a new explanation of the benefits of outdoor experiences. That is, outdoor experiences may be helpful in developing the constructs of emotional intelligence, and the development of emotional intelligence can lead to more effective leadership in a variety of situations and settings. Specific information about the type of outdoor experience and their contributions would be useful for future programming and leadership training purposes.

Emotional Intelligence and Transformational Leadership

The intercorrelations among constructs of emotional intelligence and multifactor leadership illustrated a number of interesting relationships. For example, interpersonal skill was positively correlated with most factors of transformational leadership, suggesting that interpersonal skill was an influential component in the development of a transformational leadership style. Not surprisingly, a laissez-faire leadership style was negatively correlated with all the constructs of emotional intelligence, thus suggesting more involved forms of outdoor leadership are more positively associated with the development of emotional intelligence.

The two canonical correlations revealed unique combinations among components of emotional intelligence and transformational leadership. The first function primarily emphasized situational factors, such as adaptability and stress management, which had a strong relationship to idealized influence (behavior), intellectual stimulation and inspirational motivation. The second function illustrated the strong relationship between social factors, such as interpersonal skill, and all components of transformational leadership, especially intellectual stimulation and individual consideration.

Implications and Future Work

This is an exploratory study examining outdoor leaders' emotional intelligence and transformational leadership style using comparisons with a normative sample, relationships with past outdoor experience, and relationships between emotional intelligence and transformational leadership. From an application perspective, further studies are needed to determine what ways leadership programs contribute to individuals' development of emotional intelligence and transformational leadership, and how outdoor leaders' emotional intelligence and transformational leadership influence their participants' development of emotional intelligence and leadership. Furthermore, causal links between the variables were not determined in this study and should be examined in future research. Future studies in this area may also produce more detailed

information relative to practical implications that may be involved in outdoor leadership training programs.

Finally, and perhaps most importantly, future studies should explore whether experiential education-based programs such as outdoor leadership training create higher levels of emotional intelligence and transformational leadership. This study suggests that there is a connection, and intuitively, it would seem to make sense. Future work should continue to explore this and related questions.

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