THE MOST IMPORTANT CO-LEADER SKILLS

AND TRAITS ON EXTENDED OUTDOOR

EXPEDITIONS AS PERCEIVED

BY LEADERS

By

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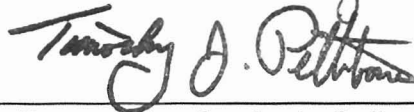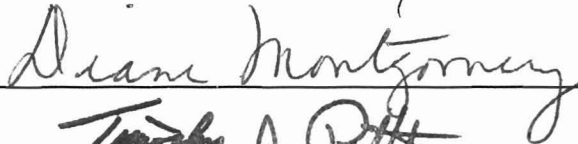
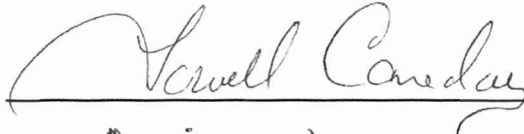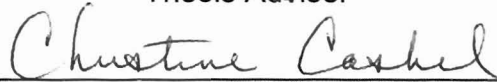University of Guelph

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CHAPTER ONE

Introduction

In the United States and Canada there is an ever-increasing involvement in outdoor adventure pursuits by the general population (McAvoy, 1987; Wagstaff, 1997). Examples of this involvement include backcountry hiking, white water rafting and kayaking, rock climbing, and mountaineering. Concurrent with this increase in outdoor adventure pursuits is the need for quality leadership of these activities. Often, outdoor participants have little personal experience with the natural environment. As a result they seek a group session that is structured for success with a person who serves as teacher, protector and manager of the experience; the leader (McAvoy, 1987). The leadership of outdoor adventure activities is a unique type of leadership (Jordan, 1989). In many cases, it occurs in an unfamiliar outdoor environment which causes anxiety and extreme emotions in participants, and often involves a dependency upon the leader. It involves leading activities:

1. that have a highly perceived and/or inherent risk;

2. over extended periods of time, usually many days;

3. into remote places where outside assistance is not readily available.

As a result, it can be a very emotionally, mentally, psychologically, and physically demanding type of leadership (Jordan, 1989).

For these reasons, outdoor adventure leaders rarely work alone; they work in leadership teams as co-leaders (Wagstaff, 1997). Each co-leader brings her/his individual skills, competencies, and personality traits into the team in order to:

1. combine technical abilities and insights;

2. provide a strong base of collective skills;

3. provide a balance of personality traits;

4. offer a diverse background of experience;

5. share leadership tasks;

6. allow each leader time away from the ever present responsibilities of leadership; and

7. provide emotional, psychological and physical support to one another.

The support co-leaders provide for one another takes on a greater level of importance when trips are extended over long periods of time. Cashel (1994) studied the cycle of participants' mood states during their participation on ten day backpacking trips. Data were collected from nine groups over a period of three years. Findings revealed that during the first three days of the trip participants had low levels of anger and depression, moderate confusion and fatigue, and high vigor and tension. On day four there were high levels of all mood states, which then declined steadily for the remainder of the trip. Cashel concluded that day four was a pivotal day for dramatic mood changes, and suggested that

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physical demands or group dynamics may have triggered these changes. This led to the question: for safety and group interaction purposes, at what level of mood disturbance should leaders be concerned (Cashel, 1994)?

Co-leader dynamics can make or break an outdoor adventure experience. In the field, the co-leader dyad or team becomes a group of its own, and its dynamics become a major part of the trip experience, both for the participants and the co-leaders (Winter, 1976). Winter believed that two or more co-leaders could be viewed as a small group in their own right, and that this group developed over time with its own issues, issues that were linked to the phases of the larger group. She believed that the co-leading group must solve their problems because their behaviors would be reflected in those of the larger group. Groups then became blocked at the exact points where co-leaders had problems with each other (Winter, 1976). Based on this theory, co-leader dynamics, if positive, will add in innumerable ways to the leaders' and participants' overall experience. If negative, they have the potential to turn a trip into an unpleasant and difficult experience for the leaders and the group.

Anecdotal evidence seems to support the difficulties leaders experience when mismatched with their co-leader. One outdoor leader, who led month-long canoe trips each summer for an organization, stated that getting along with her co-leader was the hardest part of the trip. She described how, as the course progressed and participants became more self sufficient, she began to spend more time with her co-instructor. She commented on how the trip was no longer enjoyable if she didn't get along with her co-leader (Kemp, 2001). A second

outdoor leader, who led twenty-one day trips for an organization, commented that working with co-instructors was one of the most challenging parts of her job (Cameron, 2002). Personal experience has revealed the lowering of standards of safety and care that result when co-leaders do not put aside their personal grievances in order to put participants first.

It is imperative, therefore, that a high priority be placed on the matching of co-leaders going into the field in a manner that complements each leader's skills and personality. In order to do this, we must increase our knowledge about leadership and co-leadership in the out of doors.

Statement of the Problem

One type of outdoor adventure programming, extended wilderness trips, are typically co-led (Wagstaff, 1997). However, after an extensive search, no literature was found exploring the dynamics of co-leadership in the field. There is a tremendous amount that needs to be known about co-leadership in outdoor recreation. This study examined one small part of that phenomenon.

Purpose of the Study

The purpose of this study was to determine the skills and traits outdoor adventure trip leaders perceived to be most important in their co-leaders on an extended expedition.

Research Questions

The research questions addressed in this study were:

1. What are the most important skills and traits for outdoor leaders and co-leaders to possess on an extended expedition?

2. How do leaders' perceptions of their own important characteristics differ from their preferences of characteristics for co-leaders?

3. What relationships exist among the beliefs of outdoor leaders and their demographic attributes such as age, sex, occupation, level of education, number of years of leadership experience, and the primary goals of their trip?

Significance of the Study

This study is important for two specific reasons:

1. This research will contribute information to the outdoor adventure co-leadership literature. There is currently a deficit of research information

investigating co-leadership issues in the outdoor leadership literature. This study provides a foundation for further research in this area.

2. The knowledge gained from this study will provide outdoor adventure professionals with new information regarding co-leadership. This information could be used at both the agency and the personal levels. At the agency level, this information could be incorporated into leadership training programs, as well as aid professionals in matching leaders most effectively when staffing programs. At the personal level, this information could help leaders improve their co-leadership skills, which in turn could improve co-leader dynamics.

Assumptions

The assumptions underlying this study were:

1. The co-leadership research reviewed from the disciplines of education, social work, and group work relates to co-leadership of outdoor adventure activities.

2. As with all self-reports, this study assumes participants gave honest answers, and offered no self-aggrandizements or understatements.

Limitations

The following limitations were important to this study:

1. The sample of outdoor leaders participating in this study may not be representative of the larger population of outdoor leaders.

2. Due to time constraints, the first seventeen participants available were
interviewed.

Delimitations

1. The participants of this study were outdoor leaders who had led a minimum of
one, ten day or longer trip into the wilderness.
2. Participants were eighteen years of age and older.
3. Only subjects from Ontario, Canada were interviewed.

Definitions of Terms

Co-leader An equal or peer who shares in the total responsibility of a
group during an adventure activity (Wagstaff, 1997). For the purpose of this
study, the terms co-leader, co-teacher and team leader are interchangeable.

Concourse A collection of statements taken from interviews and/or written
sources that represents the wide range of beliefs and opinions of the research
topic (McKeown & Thomas, 1988).

Condition of Instruction A specific set of oral or written questions
designed to guide participants in sorting their Q-sample items (McKeown &
Thomas, 1988).

Direct Leadership Leadership that is given directly to participants. Also called face-to-face leadership because leaders interact on a one-to-one basis with their followers (Jordan, 2001).

Extended Expedition A trip of ten or more days.

Factor A factor represents a group of persons who have ranked the statements in essentially the same order— persons who have displayed a common attitude (Brown & Ungs, 1968).

Factor Array A composite Q-sort (one for each factor), which represents the variance that is common to the people associated with a given factor (Campbell, 1996).

Factor Loadings Correlation coefficients that indicate the extent to which each Q-sort is similar or dissimilar to the composite factor array (McKeown & Thomas, 1988).

Leader A person who moves the group toward achieving its goal.

Leadership A process which assists an individual or a group to identify a goal and then achieve that goal.

Operant The natural way a person would speak of and understand a concept (McKeown & Thomas, 1988).

Outdoor Adventure Leader An individual who educates groups of people in outdoor environments and who uses activities such as hiking, bicycling, and kayaking, as the medium for experiential learning. This person is responsible for the mental and physical well-being of all participants and co-leaders (Wagstaff, 1997).

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Skills Areas of competencies which are innate and/or learned (Jordan, 2001).

Traits Personal qualities and values that are an integral part of a person's character (Jordan, 2001).

Organization of the Study

Chapter One of this study will include an introduction to the problem being studied, a formal statement of the problem, a statement of the purpose of the study, a description of the study's significance, any assumptions, limitations, and delimitations, and definitions of the key terms used.

Chapter Two will review the literature that is relevant to this study under the sections of leadership, outdoor leadership, co-leader relationships, and Q-methodology.

Chapter Three will discuss the research method, participants, research instrument, procedures, and data analysis.

Chapter Four will present the results of the data analysis.

Chapter Five will present a discussion of the results, implications to theory and practice, conclusions, and recommendations for further research.

CHAPTER TWO

Review of the Related Literature

Introduction

The following review of related literature focuses on four major topics in an attempt to summarize the current knowledge pertaining to outdoor adventure leadership and co-leadership. First, relevant literature about leadership is discussed. Second, relevant literature about outdoor leadership is discussed. Thirdly, literature related to co-leader relationships in the disciplines of outdoor recreation, therapy, counseling, and the school curriculum is reviewed. Lastly, the rationale for the use of Q-methodology and related research are discussed.

Leadership

Early leadership studies came mainly from the disciplines of business, politics, military, education, and psychology (Bass, 1990). These studies covered a wide range of topics and resulted in the postulation of a large number

of leadership theories. For simplicity sake, these theories have been categorized into a number of like constructs.

The first two theories focus entirely on the individual who is the leader as the force behind effective leadership. Most early leadership studies were primarily about white, European males. The Great Man Theories postulated that a man was a leader because he was great: these leaders were born into greatness. Many were descendents of great leaders and were raised in the presence of wealth, education, and power (Woods, 1913 as cited in Bass, 1990). As a result, they matured into leaders who possessed superior traits such as intelligence, energy and moral force. This leadership was believed to be hereditary. Carlyle (1841) believed the great leader was a man who was endowed with unique qualities that captured the imagination of his followers. Great leaders led the masses and changed the course of history. Examples of great men in history are Alexander the Great, Winston Churchill, and Mahatma Gandhi.

Trait Theories evolved from the need to identify the "superior traits" that differentiated "great man" leaders from their followers (Stogdill, 1974). These theories postulated that leaders are endowed with superior qualities (physical, psychological, personality, character) that distinguish them from their followers and enable them to lead (Bass, 1990). Trait theorists focused on identifying the specific qualities and personality characteristics of famous leaders.

Trait theories did not include women as leaders. Women, with few exceptions, had no place in European history as leaders (Klenke, 1996). Castle

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(1913) conducted a study of eminent women in history based on biographical entries in major European encyclopedias. Although Castle's research produced eight hundred and sixty eight entries of eminent women, the majority were put into classifications of mothers, mistresses, beauties, religious women, women of tragic fate, and women important only through marriage. Few women had established themselves as leaders (in the classifications of queens and politicians) in their own right. Therefore, women were ignored by early Great Man and Trait theorists (Klenke, 1996).

In the following theories, the focus is no longer on the leader as the sole force behind leadership. Effective leadership involves combinations of the interactions between leader, follower, and situation. <u>Behavioral Theories</u> are those based on leadership behaviors exhibited by leaders in relation to the situation and to followers' needs. One of the oldest models, and one that is still widely accepted, divides leadership behaviors into three main types or styles: autocratic, democratic, and laissez faire (Bass, 1990; Jordan, 2001; Lewin, Lippitt & White, 1939 as cited in Bass, 1990). The autocratic leader orders, or directs, and does not allow input from followers. The democratic leader asks for follower input and then leaders and followers share in decision making. The laissez-faire leader abdicates responsibilities and decision making, giving complete freedom to followers (Lewin, Lippet & White, 1939 as cited in Bass, 1990). These behaviors are described as a continuum, with autocratic on one end, democratic in the center, and laissez-faire on the other side of the spectrum. The boundaries

of these styles blend into each other and these combinations produce new styles of behavior.

In opposition to trait theorists, those who believe in Situational Theories believe that the force behind leadership is a matter of time, place, and circumstance. It is the situation that determined who would emerge as leader (Bass, 1990). Early situational theorists believed that events developed on a certain course, and that the right leader would emerge at the crucial moment to further the development of events. The leader of the moment emerged because she/he had the appropriate skills and character traits to accomplish the task at hand (Stogdill, 1974).

Hersey and Blanchard (1974) presented a more recent model based on changing leadership styles in which the situation determines the behavior of the leader. This model identified four specific leader behaviors – from highly directive to laissez-faire. If the leader is in a situation where the group is of low maturity (a newly formed group) she/he will adopt a highly directive, or "telling" style. When the situation changes and the leader needs the group members to buy into a certain activity or belief, she/he will use a "selling" style. As the group matures the leader becomes more supportive, using a "participating" style. Finally, when the group is able to effectively accomplish its goals on its own, the leader can step back and use a laissez-faire, or "delegating" style (Hersey & Blanchard, 1974). Situational Leadership is the use of a variety of leadership styles appropriate to changing situations.

Hersey and Blanchard's theory has been criticized as one that is difficult to apply in a work situation (Blank, Weitzel & Green, 1990). In spite of this criticism, this model has a strong following among management development specialists and has been incorporated into leadership training programs at over 400 of the Fortune 500 companies. Over one million managers a year from a wide variety of organizations are being taught the elements of this model (Fernandez & Vecchio, 1997).

The context (situation) in which these leadership behaviors are used greatly determines their effectiveness. Laissez-faire leadership has been given a negative connotation in some leadership research (Bass, 1996, 1997; Bass, Avolio & Atwater, 1996). In his Multifactor Leadership Questionnaire, which investigates transactional and transformational leadership, Bass (1997) included a laissez-faire component defined as the least effective and satisfactory type of leadership – a non-leadership. However, if used as described above by Hersey and Blanchard (1974), in specific situations with a mature group laissez-faire can be a very effective style.

In Group Theories, leadership exists in the relationship between the leader and the followers as a group. In group leadership, the direction and development of groups and their goals are purposefully influenced and guided (Stogdill, 1974). Blake and Mouton (1982) proposed the Managerial Grid, a two dimensional view of leadership based on the styles of "concern for people" (y axis) and "concern for production" (x axis). These styles were two generalized classes of leadership

behaviors; those which promoted task achievement and those which promoted personal satisfaction among group members.

In the Managerial Grid, leaders with a concern for people exhibited behaviors such as showing respect for employees' ideas, regard for their feelings, and concern for their comfort, well-being and satisfaction. Leaders with a concern for production exhibited behaviors such as organization of work tasks, a focus on technical aspects, and a focus on work goals. The grid had nine possible positions along each axis, for a total of eighty one possible leadership styles. The grid showed the dominating factors in a leader's thinking in respect to group goal achievement. Blake and Mouton (1982) concluded that managers performed best under a 9,9 style (high concern for people and production) as opposed to a 9,1 (high concern for task, low concern for people) or a 1,9 style (low concern for task, high concern for people). Thus, the group leader becomes an analyst of group needs and an innovator of positive behavior in order to move people, as a group, toward their goals.

Humanistic Theories emerged from American ideals of democracy and individual freedoms. Theorists who purported these ideas were concerned with the development of the individual within an effective and cohesive organization (Bass, 1990). Humanistic leaders believe the function of leadership is to provide freedom for individuals to realize their motivational potential in order that they fulfill their needs, while at the same time contributing to the success of the organization. McGregor (1966) proposed two opposing views of people in the work place; Theory X and Theory Y. Theory X presented the negative view that

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people are passive and dislike work. Theory X leaders, therefore, would attempt to direct and motivate employees to fit organizational needs, through coersion and threats of punishment if necessary. Theory Y presented the positive view that people possess motivation and a desire for responsibility if they are committed to the work objectives. Theory Y leaders attempt to arrange the organization in order to meet the needs of both. The Theory Y leader, then, is a humanistic leader.

Currently, two of the most popular humanistic theories in organizational leadership are the Transactional and Transformational Leadership Theories. In Transactional Leadership Theory, leadership is defined as an exchange between the leader and followers (Bass, 1990). The exchange is established as long as there are benefits to both. The leader gives such benefits as recognition, status, and direction to followers in exchange for esteem and responsiveness from followers (Hollander, 1987 as cited in Bass, 1990).

Transactional leadership contains three components instrumental to followers' goal attainment: contingent reward, active management by exception, and passive management by exception (Avolio, Bass & Jung, 1999; Bass, 1997, 1990). Those who lead by contingent reward continually and actively engage in a positive exchange of reward for follower performance. In exchange for followers' support, effort, and successful performance, leaders will reward them with assistance, resources, and commendations. Leaders who use active management by exception actively monitor followers' performance and correct any deviations from regulations and standards before mistakes occur. When

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leaders employ passive management by exception they do not actively monitor followers' performance. They wait until mistakes are brought to their attention and then have to correct these mistakes. In both components of management by exception the follower is corrected for mistakes that occur as a result of deviations from policies and procedures (Bass, 1997).

Bass (1985) described the transactional leader as one who works within the constraints of the organization. She/he closely follows the rules, policies, and procedures. Avolio, Bass and Jung (1999) believe that transactional models of leadership do not build trust or develop the motivation in followers in order for them to achieve their full potential in the workforce. The authors believe the new work environment requires leadership that goes beyond the basic transactional style to styles that are intellectually stimulating, inspirational and charismatic (Avolio, Bass & Jung, 1999).

In Transformational Leadership Theory, the leader is seen as a developer of people. The transformational leader generates awareness of the mission or vision of the group, organization, or society, motivates followers to rise above their own self interests for the good of the group, develops followers to higher levels of potential, and stimulates followers to view their surroundings from new perspectives (Bass & Avolio, 1994; Bass, 1990).

Transformational leadership has been described as an expansion of transactional leadership (Bass & Avolio, 1994). While the transactional leader works within the constraints of the organization, the transformational leader changes the organization (Bass, 1985). Transformational leaders set up

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exchanges or agreements with followers, but in a specific way. They set high challenges. They motivate others to do more than they thought possible. They often incite extremely high performances. They achieve this by employing what Bass (1997) described as the four i's of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

Leaders employ idealized influence by displaying positive personal characteristics and behaviors — trust, risk taking, strong personal values, commitment, and ethics. Leaders are admired for these characteristics and become role models who instill confidence, loyalty, and pride in their followers. Leaders employ inspirational motivation when they describe positive visions of the future, speak enthusiastically and optimistically, challenge their followers with high standards, and continually encourage them to achieve these high standards. When using intellectual stimulation, leaders encourage new ideas, perspectives, and ways of doing things. They constantly question traditions, existing beliefs and assumptions, and encourage their followers to do the same. Leaders display individualized consideration when they treat others as special and unique individuals. They consider each person's needs, abilities and aspirations, and empower by listening, advising, teaching and coaching (Bass, 1997).

Bass (1985) believed that leaders and followers begin with a transactional relationship and those leaders who are also transformational then build on this relationship. He developed the Multifactor Leadership Questionnaire (MLQ) in order to measure the transactional and transformational leadership concepts.

Laissez-faire leadership was included as a non-leadership or passive leadership component (Bass, 1985). The MLQ has been used extensively (Avolio, Bass & Jung, 1996, 1999; Bass, Avolio & Atwater, 1996; Bass, 1997; Carless, 1998; Den Hartog, Van Muijen & Koopman, 1997; Gardner & Cleavenger, 1998; Howell & Avolio, 1993; Sosik & Megerian, 1999; Wofford, Goodwin & Whittington, 1998). As a consequence, transactional and transformational leadership are often investigated together.

Making a resurgence over the past several years is a theory that emphasizes the emotional domain of leadership, the Theory of Servant Leadership (Greenleaf, 1977; Spears, 1995). In the late 1960s, Robert Greenleaf became concerned with the United States becoming dominated by large institutions, and these institutions not being concerned for individuals' well being; or as he described it, "not serving the people well" (Greenleaf, 1977,p 13). He proposed a theory in which leaders within these institutions, whether in business, education, or the church, put their efforts into serving people with skill, understanding, and spirit. He called these leaders "able servants" to whom followers would respond (Greenleaf, 1977) and coined the term "Servant Leadership".

> The servant-leader is first and foremost a servant of people, one
> who has a natural desire to serve first. This conscious choice to
> serve will then inspire that person to lead. This leadership is in
> contrast to one in which a person aspires to lead first in order to
> assuage a power drive or accumulate material wealth. This

difference between servant first and leader first manifests itself in the servant leader making sure that peoples' highest priority needs are served, and as a result they become healthier, freer, wiser, more autonomous and more able to become servant leaders themselves. (Greenleaf, 1977, p. 13)

Servant leaders inspire people. They create strong teams in order to promote a strong sense of community. Physical characteristics are rarely mentioned, except to expound the importance of physical fitness to positive self-esteem and stamina. Ten characteristics of servant leaders have been described by Spears (1995). These characteristics include: 1) listening, which reinforces community and decision-making skills, 2) empathy, in which leaders try to understand and feel for others, 3) healing, which includes broken spirits and emotional hurts, 4) awareness, of self and in general, 5) persuasion, rather than relying on personal authority, 6) conceptualization of ideas, 7) foresight, 8) stewardship, which emphasizes openness and trust, 9) commitment to the growth of people, and 10) building community (Spears, 1995; Jordan, 2001). These characteristics illustrate the importance of possessing interpersonal and conceptual skills and positive personality traits for successful leadership.

Servant leaders advocate a global and holistic leadership. Leaders require an awareness of other worlds, the ability to step outside the box, a sense of stewardship, an awareness of self and others, a continuing education and an understanding of the change process (Clark, 1999; Dreher, 1997; Fulton, 1995;

Nair, 1994). Leadership, as it is expounded in the literature at the beginning of the 21st century, is the ability to make others the best they can be.

Leadership Research

Researchers have explored leadership in relation to many factors (Bass 1997; Bass & Avolio 1993; Bass, Avolio & Atwater, 1996; Dering, 1998; Dubinsky, Yammarino & Jolson, 1995; Sosik, Avolio & Kahai, 1997; Sosik & Megerian, 1999; Veal & Rikard, 1998). In this section, leadership in relation to personal characteristics, emotional intelligence (EQ), behaviors, sex/gender, and universality is discussed.

The following studies investigated the relationships between personal traits and leadership. Recent work in organizational behavior suggested that transformational leadership could have a more favorable impact on employee work outcomes than other leadership approaches. Key organization personnel wanted to know what personal characteristics distinguished managers who were more inclined to use transformational leadership from those who were less inclined to do so. The premise was, if key personal characteristics of successful managers using transformational leadership could be identified, then individuals with these characteristics could be recruited and selected, or training programs could be developed to enhance such characteristics in managers (Dubinsky, Yammarino & Jolson, 1995).

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Dubinsky, Yammarino and Jolson (1995) conducted a study to explore the relationships between personal characteristics of sales managers and dimensions of their transformational leadership. The subjects were the entire sales organization in a division of a multinational medical products firm; 140 sales people and 34 managers. The sales people rated their supervisors' transformational leadership qualities. The managers rated their own personal characteristics. The four dimensions of transformational leadership investigated were charismatic leadership, inspirational leadership, intellectual stimulation, and individualized consideration. The personal characteristics investigated were categorized under seven major headings; emotional coping, behavioral coping, abstract orientation, risk taking, innovation, use of humor, and experience. Correlation analyses were conducted to examine the relationship between each of the variables. Study findings revealed that there was no significant positive relationship between personal characteristics and transformational leadership dimensions (Dubinsky, Yammarino & Jolson, 1995).

The findings of the above study were contradicted in Sosik and Megerian's (1999) study, which investigated the relationship between emotional intelligence (EQ) and transformational leadership. EQ was defined as the set of attributes (traits) that helps a person monitor their own, and others', feelings, beliefs, and internal states in order to help guide their own, and others' thinking and actions. The personality characteristics of self-awareness, emotional management, self-motivation, empathy, and relationship management were identified as key aspects of EQ (Goleman, 1995, as cited in Sosik & Megerian, 1999). These

aspects of EQ were theoretically linked to transformational leadership behaviors, since leaders who possessed aspects of EQ were likely to exhibit transformational behaviors.

The purpose of Sosik and Megerian's study was to examine whether or not self-awareness of managers would moderate relationships between aspects of emotional intelligence and transformational leadership behavior, and aspects of transformational leadership behavior and managerial performance. Participants were 318 employees of a large U.S.-based information services and technology firm. Sixty-three were managers who rated themselves on their EQ and transformational leadership qualities. One hundred ninety two were subordinates who rated their managers' transformational leadership qualities and performance outcomes. Sixty-three superiors rated their managerial performance.

The study results indicated that managers who were self-aware possessed more aspects of EQ, and were rated as more effective leaders, than those who were not self-aware. These results indicated that the aspects of EQ identified in the study as being associated with self-awareness could provide managers with a criteria for identifying potentially effective management candidates (Sosik & Megerian, 1999). The character trait of self-awareness was significantly related to effective leadership.

In an attempt to further increase their understanding, researchers have investigated leadership in relation to behaviors. Some studies demonstrated the importance of behaviors in relation to leadership and leadership training (Sosik,

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Avolio & Kahai, 1997; Veal & Rikard, 1998). As an example, student teaching has been viewed as a form of leadership training and is integral to most teacher preparation programs. The student teaching process involves a triad of a university-based supervisor, a school-based cooperating teacher and a student teacher. The triad relationship has traditionally been a hierarchy. University personnel make the decisions about the choice of cooperating teacher, the duration of student teaching, the requirements of planning and written work, and the final grading. Cooperating and student teachers are excluded from many of these decisions (Veal & Rikard, 1998).

Veal and Rikard (1998) explored the student teaching triad from the cooperating teacher's perspective. The participants of this study were a convenience sample of twenty-three physical education teachers and graduate students enrolled in pedagogy courses at two universities in a southeastern state. The teachers were cooperating teachers who had supervised student teachers within the last three years and were willing to be interviewed by the investigators.

From the teachers' interviews it became clear to the authors that the interpersonal aspect of the triad's working relationship was the dominant theme. The interviews revealed a sometimes negative and adversarial environment. Even though the university triad member made all the major decisions, student and cooperating teachers often went through the student teaching experience with little involvement from the university. Then, when university personnel became involved, the working relationship was often filled with tension.

The study proposed a change in the way student teaching triads were run. The authors believed that if the hierarchy was abolished and replaced with a democratic triad where collaboration existed, many of the conflicts could be avoided. The authors proposed specific behaviors for creating a collaborative, democratic team. First, they proposed Habermas's four norms of universal pragmatics: to speak comprehensively, sincerely, legitimately, and truthfully. Secondly, they proposed an even distribution of conversation during conferences attended by all triad members. Thirdly, the researchers proposed that all members recognize student teachers' need to be more involved in their own professional development process. By taking ownership of their own goal setting and action planning, students would be actively involved in their own teaching triad (Veal & Rikard, 1998).

Dering (1998) investigated leadership behaviors which would increase organizational effectiveness through leadership training programs. Dering believed that behavior of leaders, more than any other factor, would help organizations achieve profound change. Over the past decade, the study of leadership has taken two paths. One branch contains relational models emphasizing the emotional domain of leadership. The other contains models of contemporary organizations (Dering, 1998). The author investigated these current models, focusing on leadership behaviors to determine principles of effective leadership and leadership development. Dering then translated these criteria into a set of competencies useful in selecting, developing, and rewarding leaders in organizations. A set of nine core competencies, each including specific

tasks and behaviors, were developed. The nine competencies included:
1) agreeing on key leadership expectations, 2) identifying core leadership
competencies, 3) articulating the quality leadership framework, 4) setting
leadership performance expectations, 5) integrating performance expectations in
a performance management system, 6) planning for individual development,
7) building a leadership development program, 8) reinforcing the leadership
behaviors, and 9) rewarding quality leadership. The author concluded that an
organization can produce profound and immediate results by directing its
attention to the development of leaders' behaviors (Dering, 1998).

In addition to leadership behaviors, transformational leadership has been
investigated in relation to situation. Sosik, Avolio and Kahai (1997) demonstrated
how situation plays a role on the effectiveness of leadership style and group
performance. Some organizations are widely using computer networking (called
a Group Decision Support System, or GDSS) to enhance group effectiveness
skills. In addition, management is interested in knowing how leadership affects
group potency and effectiveness. Sosik et al. (1997) evaluated the effects of
transactional and transformational leadership style and anonymity level on
groups' collective effectiveness in performing a creativity task using computer
networking. The study was designed to enhance the understanding of
relationships among leadership, group potency, and effectiveness in a GDSS
context.

Study subjects were 159 students in an introductory human resource
management course assigned to one of thirty-six groups. Each group, led by an

assigned leader, was given a three-part task to be completed over a period of time. Research data were analyzed using a Partial Least Squares technique. The authors concluded that anonymity had moderating effects with transformational versus transactional leadership on group potency and effectiveness.

In anonymous conditions, groups working under a transformational leader were more effective in creating group reports than groups under a transactional leader. In identified conditions, groups working with a transactional leader were more effective in creating group reports than groups with a transformational leader. The authors explained that being able to identify a group member's contribution was consistent with a transactional leader's focus on recognizing an individual for her/his performance. Anonymity made it impossible for group members to receive credit for their individual contributions to a group's product. Thus, the transactional leader's promises of rewards for individual contributions were now invalid. It appeared that, in a computer networking setting, anonymity was a moderating variable. The situation (anonymous vs identified) played an important role in the effectiveness of leadership style and group performance (Sosik, Avolio & Kahai, 1997).

Bass, Avolio and Atwater (1996) conducted a study to examine the relationship of leader sex to leadership style. Bass, Avolio and Atwater investigated whether or not female and male managers differed in their use of transactional and transformational leadership styles. This study used the MLQ with three different sampling conditions. In all three studies, managers were rated by the women and men who reported directly to them.

In the first study employees rated female leaders more transformational than male managers. The female managers were perceived to be more effective leaders than the male managers, and the followers of female managers were more satisfied employees than those of male managers. In the second study employees perceived female managers to exhibit more charisma and individualized consideration than male managers. In the third study employees perceived female managers to exhibit more charisma than male managers. Overall, women were rated to have more of a transformational leadership style than their male counterparts. Women, therefore, were revealed to be effective transformational leaders (Bass, Avolio & Atwater, 1996).

Bass (1997) believed in the universality of transactional and transformational leadership. Bass (1997) believed that transactional and transformational leadership could be observed in a wide range of organizations and cultures. He investigated three corollaries previously presented by Bass and Avolio (1993). The first corollary stated there was a leadership style hierarchy in terms of effectiveness, effort and satisfaction. Transformational leadership was most effective and satisfying, then contingent reward, then active management by exception, passive management by exception, and finally, laissez-faire leadership. Secondly, transformational leadership added to the effects of transactional leadership. The former did not substitute for the latter. Thirdly, peoples' ideals of leadership were transformational, regardless of the country in which they resided. Bass (1997) investigated these corollaries using the MLQ. He concluded that although there were differences in cultural beliefs, values, and

norms that temper leader-follower relations, all three corollaries appeared to be universal.

Much of the research in general leadership theory has been investigated in business settings. Researchers believe that certain personality traits are related to effective leadership. However, it is sometimes difficult to show this relationship through quantitative studies. Researchers continue to explore the realm of behavior in relation to leadership. Leader behaviors are believed by some researchers to be the most important factor in helping organizations to be successful (Dering, 1998; Veal & Rikard, 1998). Yet other research has explored the situations that play a role in the effectiveness of leadership style and group performance (Dubinsky, Yammarino & Jolson, 1995). Two of the most popular current organizational theories, transactional and transformational leadership, have been investigated in relationship to several factors; character traits, identified versus anonymous situations, sex, and universality (Bass, 1997; Bass, Avolio & Atwater, 1996; Sosik, Avolio & Kahai, 1997; Sosik & Megerian, 1999).

As demonstrated by the research reviewed here, all of the leadership theory constructs are still in practice. In current leadership research, leadership theories are often investigated in part and in combination.

Outdoor Leadership

In addition to their followers, outdoor leaders need to take into account the uniqueness of the outdoor setting and its influence on the group. Jordan (1989)

proposed a leadership theory that accounts for the environment as well as group/leader dynamics. She described outdoor leadership as direct leadership in an outdoor setting that has its own unique qualities.

First, the lack of familiarity of the outdoor environment to the majority of participants greatly enhances the experience and directly impacts the relationship between participant and leader. Secondly, the perception of risk to the participants is increased in outdoor environments. This increased stress further increases the groups' expectations of the leader. Thirdly, programs occur over extended periods of time. This extended time period results in changes in leader/follower roles, relationships and expectations over the course of the trip. These unique demands on outdoor leadership necessitate a leadership theory that is unique to outdoor recreation.

Jordan (1989) proposed combining two theories— the Interaction-Expectation (group theory based) and the Comprehensive (situational theory based) models— to form the Comprehensive-Interaction-Expectation, or C-I-E model. The Interaction-Expectation model of leadership is concerned with the dynamics between leader and followers (collectively group members) as they interact, accept and reinforce each others' behaviors (Homans, 1950 as cited in Stogdill, 1974). Different levels of interactions are described, one of which forms an optimal relationship of acceptance and reinforcement for each situation. This theory supports the complex nature of leader/follower interactions that occur during extended wilderness trips.

The Comprehensive theory identifies the interactions of the leader, followers, and the situation. The leader component includes the leaders' knowledge, skills, and abilities, experience, and style. The followers' component includes each person's knowledge, skills, and abilities, experience, and ability to perform tasks. The situation component includes external forces on the group and the environment in which the experience is taking place. The intersection of these three components determines the appropriate leadership style for a given situation. The C-I-E model combines two theories to make a more complete theory which equally addresses both the environmental and the complex interpersonal interactions which affect outdoor leadership. The outdoor environment is a strongly influencing component in the leader/group/situation interaction, and the three are investigated as such. In this manner the C-I-E model forms a theory unique to outdoor leadership (Jordan, 1989).

The leader/group/ situation interaction in outdoor environments required outdoor leaders to possess specific competencies in order to be effective. The following studies focused on the skill and trait competencies necessary for effective outdoor adventure leadership. The competencies investigated were technical skills, environmental skills, human relations skills, conceptual skills, and personality traits. Technical skills include backpacking, emergency care, minimum impact camping, reading map and compass, and outdoor living/survival skills. Environmental skills include knowledge of, and familiarity with the trip environment, personal environmental philosophy and values, outdoor ethics, and comfort in the outdoor environment. Human relations skills include exhibiting

honesty and integrity, ability and willingness to communicate openly, ability to handle personal conflict, and ability to feel empathy for others. Conceptual skills include self-awareness, self-actualization, good decision-making, and ability to promote a sense of community. Personality traits include calmness and patience, a sense of humor, emotional maturity, and charisma. Technical and environmental skills were considered to be task functions. Interpersonal and cognitive skills, and personality traits were considered to be human relations functions. Demographic variables related to age, sex, level of education, and work experience were also investigated.

Swiderski (1981) reported a lack of agreement among outdoor leaders concerning the components that are necessary for high quality outdoor leadership. The purpose of the study was to identify the land-based outdoor leadership competencies that were rated as extremely important by outdoor leaders. Swiderski (1981) distributed a questionnaire consisting of fifty outdoor leadership competency statements to 282 outdoor leaders in five western Forest Service regions of the United States. Participants were asked to give their opinions on the importance of each of the fifty competencies: a six point Likert-type scale was used for measuring responses. These competencies were then prioritized and ranked in order of their importance.

The study concluded that 34 competencies were extremely important for an outdoor leader to possess regardless of the region in which she/he may be working. Examples of these competencies included: 1) exercise good judgment and common sense while performing duties under stress and pressure; 2) teach

causes, prevention, symptoms, and physiological effects of environmentally related injuries and illness which may include, but not be limited to; hypothermia, frostbite, heat exhaustion, heat stroke, high altitude and fluid intake; 3) follow a personal ethic which displays sensitivity and concern for the wilderness reflected in everyday practices consistent with accepted and sound environmental values; 4) generate respect, interest, humor, enthusiasm, confidence and commitment through actions, feelings and demonstrations; 5) demonstrate minimum impact off-trail campsite selection and differentiate between low and high impact areas; and 6) follow effective lifesaving and water rescue procedures in emergency situations. Swiderski recommended that organizations that offer outdoor leadership training programs include the 34 competencies in their programs and instructional curricula (Swiderski, 1981).

Green (1981) reported that colleges and universities that were training outdoor leaders were inconsistent in their leadership courses. The purpose of Green's 1981 study was to obtain an overall agreement on the content of a college-level outdoor leadership course for land-based outdoor activities for the Pacific Northwest. Using a Delphi technique, Green had 61 Pacific Northwest, land-based, outdoor leaders identify the topics they felt should comprise the content of a college-level outdoor leadership course. He then had the same subjects rate the value of each topic using a Likert-type scale.

Thirty-five topics, mainly in the categories of outdoor skills, administration and management, and emergency medical techniques were recommended to become the content of a college-level, outdoor leadership course. The top ten

topics were; risk management plans, judgment, wilderness ethics, first aid, analyzing risks, minimum impact practices, outdoor leadership objectives, hazard analysis/hypothermia, back country first aid, and minimum impact philosophy. Research participants believed that technical skills and emergency medical topics should be aquired prior to participation in the college outdoor leadership course (Green, 1981).

Riggins (1985) looked at biographical and personality factors that contributed to the leadership effectiveness of Outward Bound instructors. The six biographical characteristics found to significantly relate to leader effectiveness were leader position, number of courses instructed, participation as a student, level of formal education, age, and family size. Instructors were asked to rank, in order of priority, the skills and personal qualities they felt were the most important to possess as leaders. The choices were under the general headings of technical expertise, interpersonal skills and desirable personal qualities. The specific personal qualities listed were ranked in the order of compassion/sensitivity, judgment/common sense, patience, maturity/positive self image, 'real life' experiences, insight/perception, interest in people, sense of humor, resourcefulness, flexibility/creativity, honesty/integrity, love of outdoors, and humility. Additional personal qualities that were named, but not ranked, were: love of learning, self motivation, decision making ability, positiveness, sense of responsibility, devotion, physical conditioning and cooperative spirit. The majority of personal qualities were ranked lower in priority than the technical and interpersonal skills. The author concluded that although certain personality

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characteristics were important for leaders to possess, there was no statistical evidence linking these personality characteristics and leadership effectiveness (Riggins, 1985).

Galpin and McEwen (1987) had 130 outdoor adventure trip leaders rate themselves on the possession of ten skill competencies from three categories: technical skills, interpersonal skills, and philosophical understanding skills. The technical skill category included backpacking, rock climbing, emergency care, canoeing, and minimum impact camping. The interpersonal skill category included creative problem solving, evaluation and debriefing, and outdoor teaching. The philosophical skill category included knowledge of experiential education philosophy and knowledge of leadership responsibilities.

Interpersonal skill competencies were ranked the highest as a category, while technical competencies were ranked lowest. These results were unexpected, since Galpin and McEwen (1987) had reviewed McAvoy (1978) and Buell's (1981) work reporting outdoor leaders as highly competent in the technical skill area, and usually deficient in the areas of interpersonal and philosophical understanding skills. Galpin and McEwen (1987) explained the high ranking of interpersonal skills as being due to the subjective nature of leaders' perceptions of themselves in this skill area. One either knew, or did not know, a technical skill. This was not the case with interpersonal skills. A leader could base her perception of possessing good interpersonal skills on the fact that she usually got along with people. The study concluded that interpersonal skills would

remain the most subjective, and therefore, the most difficult to measure (Galpin & McEwen, 1987).

In his 1985 study, Priest reported the necessary critical leadership skills as being both technical and interpersonal (human relations) skills. In his survey, Priest asked outdoor professionals to identify and rank 39 outdoor leadership competencies. The outdoor professionals ranked safety and interpersonal skills as the most important competencies for leaders to possess. The 39 skills were listed and described in detail. In addition, the possession of important personality traits necessary to success was ranked number one in the category considered "of great importance." Although "traits" were seen by leaders to be most important, Priest's study did not list or describe these traits (Priest, 1985).

In 1987, Priest surveyed 250 outdoor leadership experts regarding their beliefs for the requirements of a competent outdoor leader, and their preferences for selecting and preparing outdoor leaders. From a list of 14 skills and attributes necessary for outdoor leaders to possess, traits/behaviors were ranked twelfth in importance. Safety, judgment, awareness, empathy, group management, problem solving, instructional, technical activity, flexible style, philosophy/interest, environmental and organizational skills were viewed as more important competencies for outdoor leaders to possess than traits/behaviors. Self-concept and physical fitness were viewed as less important than traits/behaviors.

The possession of personal traits was ranked fourth in importance by outdoor leadership experts when expressing preferences for selecting candidates for outdoor leadership training. In preparing candidates for outdoor leadership,

the possession of personality traits was ranked thirteenth. It would appear that candidate selection was based more on the possession of personal traits than on skills, while candidate preparation was based more on the teaching of skills than on traits. Personality traits were seen as important, but not something that could be taught. As in his 1985 study, Priest did not describe what these personality traits were (Priest, 1987).

Outdoor leadership research has focused on the technical skills, environmental skills, human relations skills, conceptual skills, and personality traits required for the success of an individual leader (Galpin & McEwen, 1987; Green, 1981; Priest, 1985, 1987; Riggins, 1985; Swiderski, 1981). These authors differ in their conclusions as to the hierarchy of each of these categories (which are influenced by the primary goals of the trip), and as to exactly what skills and traits constitute these categories. However, they are unanimous in their belief that these specific skills and traits, in various combinations, are indeed necessary for outdoor leaders to be effective.

Co-leader Relationships

Co-leadership has been investigated as it relates to social work, group work, and classroom teaching (McGee & Schuman, 1970; Nosko & Wallace, 1997; Stempler, 1993; Tuckman & Finkelstein, 1999; Waldman, 1980; Winter, 1976). In these disciplines, the importance of leading in teams and the skills and

traits necessary for effective co-counseling and co-teaching have been researched and discussed.

Co-leadership in Social Work

Researchers have examined specific variables thought to lead to co-leader satisfaction. Alfred (1992) examined the status of sex of psychotherapy co-leaders and their influence and effectiveness on members receiving group therapy. Subjects were 21 female and 18 male clients in group therapy. Five therapy groups were led by male senior staff leaders paired with female junior staff, and five groups were led by female senior staff paired with male junior staff. Participants rated the co-leader pairs for perceived influence using the Counselor Rating Form (CRF), and for co-therapist effectiveness using the Counselor Effectiveness Scale (CES). Assessments were taken during the first and the last sessions of therapy. Initially, female leaders were seen as less influential and effective than their male co-leaders. On the second assessment, however, women were seen as equally, or more influential and effective than their male co-leaders. Alfred concluded that, over time, women were seen as equally influential and effective as their male colleagues (1992).

Silberstein (1981) investigated the variables of birth order and interpersonal orientation (affection, inclusion, and control) on group co-leader satisfaction. Research participants of the study were 47 mental health workers who worked as co-leaders, recruited from five clinical settings in which co-

leadership was used in therapy, counseling, discussion, and training groups. Participants rated each other on their co-leader relationship and their satisfaction of working in pairs using Kamerschen's Cotherapist Inventory.

Silberstein hypothesized that leaders who exhibited a compatibility for interpersonal need and birth order would experience greater satisfaction working as a co-leading pair. Study results did not support this hypothesis. However, two group related factors, the structure of group sessions and age of group members, were found to affect co-leader satisfaction. Co-leaders of ongoing groups reported greater satisfaction than those conducting time-limited group sessions. Co-leaders of children's groups reported greater satisfaction than those of adult and adolescent groups. The researcher concluded that the group co-leader relationship was affected by a complex combination of factors, both internal (need for affection, inclusion and control) and external (length of session, group participants) (Silberstein, 1981).

The difficulties and complexities of the co-leader relationship were investigated by Kolodny (1980). He believed that the appropriate co-leader was one of the most elusive figures in all clinical social work. He composed a list of criteria for a co-leader based on earlier investigations. The list included choosing someone with: equal status (Yalom, 1975), similarity in competence and sensitivity (Yalom, 1975), compatibility in temperament (Mullan & Rosenbaum, 1979), the ability to accept another emotionally, understand each other's methods, and share common therapy goals (Mullan & Rosenbaum, 1979). He concluded that "…something akin to wizardry in most instances would be

necessary in order for the criteria to be met..." (p. 34). In other words, finding the perfect co-leader was next to impossible.

In Waldman's (1980) case study, the use of co-leadership as a method of training was evaluated from the perspective of a student's direct experience. Waldman examined her experiences as a social work student co-leading therapy groups with a more experienced staff member. She described a good deal of anxiety and struggle, and questioned whether co-leadership was the most effective method for training students. She believed that the realistic differences in terms of status, experience, and authority led to a problem of role definition, and when this was not acknowledged openly and honestly, feelings of intense frustration and resistance to sharing leadership responsibilities arose. Waldman believed that co-leadership should only be used when both leaders agree to work on an equal basis throughout the complete therapy process. She also believed that in spite of the differences, if one believed her/his co-leader was genuinely invested in helping group members it was easier to overcome obstacles to work toward this goal. She concluded that the problems inherent in the senior-junior training format outweighed the benefits (Waldman, 1980).

Winter (1976) studied the internal dynamics of the co-leader relationship over time. She studied co-leaders in the areas of co-taught college classes, group therapy, weekend encounter groups, and college study groups. This study was designed to call attention to the changing pressures on co-leaders over time. Winter stated:

when the group is led by two individuals – a co-leading pair – the fluctuating expectations and demands, and the interplay between members and leaders over time, become especially complex and interesting. The dyad may be viewed as a small group in its own right – developing over time with its own internal issues, linked to the phases and preoccupations of the larger group at the time (1976, p. 349)

Winter (1976) divided group development into four separate phases as proposed by Mills (1964) and plotted the co-leader roles and concerns at each of these phases in relation to group concerns. Winter believed that the dyad must solve their problems as a two person group because their behaviors would be reflected in the interactions of the larger group, and that groups become blocked at the exact points where co-leaders have problems with each other. She went on to say "…it is the task of the co-leaders to solve as a two-person group the particular problem being simultaneously confronted by the group as a whole…" (p. 361). This belief was supported in the works of Nosko and Wallace (1997) and Stempler (1993).

In 1993, Stempler described the successful building of co-leader relationships based on an egalitarian ideal using Schwartz's Mediating Model as the theoretical foundation for group work and student training. This model divided group development into four phases – tuning in, beginning, work, and transitions and endings. Before actual group work began, task equity between leaders was created by separating and switching roles, delineating clear boundaries, and

giving the trainee the leadership of meetings. In the beginning phase where group facilitation began, the supervisory co-leader demonstrated high flexibility with her/his leadership style in order to support the growth of a relationship that was as egalitarian as possible. The supervisory co-leader accepted responsibility for being as aware as possible of both the process and the content of each group meeting so that the trainees could have the freedom to risk making contributions in each meeting. She/he consistently offered encouragement, and asked trainees to self examine their interventions in terms of their contribution to group growth. The result of the above process was the establishment of a synchronous relationship between co-leaders that was intrinsic to learning (Stempler, 1993).

Two other important ways of developing an egalitarian co-leader relationship were by presenting a 'real' image to each other through a willingness to admit to mistakes and by maintaining respect for each other's differences (Stempler, 1993). Respect and mutuality between supervisor and trainee was the essence (heart) of this model. Then, clear differences in the functioning of the co-leaders could exist. When the group sensed the leaders were respectful and 'in sync', despite their differences, they could then work and grow together effectively (Stempler, 1993).

Nosko and Wallace (1997) examined the development of a female-male co-leadership team and its impacts on therapy groups for male batterers. The study was based on the authors' many years experience as a co-leading team of therapists. The primary facilitator issue was the necessity to achieve equality between co-leaders in order to begin to change the norms of the therapy group

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members. This demanded that the co-therapists put a great deal of effort into their own team development. The authors investigated their development as the process of four stages — formation, development, stabilization, and refreshment.

In the formation stage Nosko and Wallace (1997) addressed the issues of feelings of competence, personal adequacy, performance anxiety, personal identity struggles, treatment philosophies, goal setting, time frames and working plans, and interpersonal strategies and tactics. In the development stage the co-leaders worked on the ability to complement each other. They attempted to do this by equalizing their power, responsibility, and use of skills, and by developing competence and comfort in assuming various facilitating roles and styles. In the stabilization stage the therapists began to perfect the previous stage and to anticipate each others strategies and tactics. Finally, in the refreshment stage, the team became more creative and innovative. They developed and revised a group model, and actively researched and wrote papers. In this stage they felt they had realized an unselfconscious interchangeability of status and power between them.

Nosko and Wallace believed that keeping the final group goal in sight was of utmost importance for effective co-leadership. This could be attained through awareness of relevant issues and careful planning and evaluation of co-leadership and group processes. The authors concluded that the co-leadership relationship is extremely complex. In order to effectively lead a group, the co-leadership team must continue to develop (Nosko & Wallace, 1997).

In contrast, Tuckman and Finkelstein (1999) stated that when supervisors co-lead group therapy sessions there were no truly equal teams, regardless of age, professional status, or work experience. Dyads where co-leaders had both an obvious difference in status (junior/senior teams) and those who had a more equal status (senior/senior teams) should always explicitly address these variables outside of the therapy room in order to avoid a power struggle during a session. The authors contended that many therapists had trouble adapting to co-leading therapy because they were accustomed to working in a solo treatment model, and in order for them to co-lead they must learn a whole new set of skills (Tuckman & Finkelstein, 1999).

Co-leadership in Education

Winitzky, Sheridan, Crow, Welch and Kennedy (1995) recognized that in order to more readily meet the needs of youth, education must be the shared responsibility of classroom teachers, special educators, administrators, related professionals and parents. In order to fulfill this need a university program was developed that offered courses in collaboration, which could lead to undergraduate and graduate degrees in education, psychology, and counseling. Faculty from these departments co-taught courses about interdisciplinary teaming in order that these future professionals be able to work together more effectively.

The goal of the project was to create cross-disciplinary teaching teams. This was accomplished by collaboration modeling whereby prior to teaching, instructors met and planned the course. Throughout the course they engaged in on-going dialogue and formative evaluation to determine whether they and the students were meeting the course objectives. The co-instructors continually made adjustments in order to ensure students attained the desired knowledge and skills. Also, instructors shared responsibility and expertise while presenting information, leading discussions, and facilitating course activities (Winitzky et al., 1995).

This was a very challenging project for the faculty. The development of a trusting, respectful, supportive relationship among faculty was a prerequisite to the success of the course. Upon evaluation of the programs, Winitzky et al. (1995) concluded that the process of learning team teaching was unpredictable, difficult, and time consuming for the students, and that it required basic trust and shared ownership of problems and solutions. The researchers pointed out that teaching is a profession that has traditionally been an individualistic one, and this in part contributed to the discomfort of working in teams and the lack of trust and shared ownership in this venture. However, the collaborative effort could be successful if the teachers could put aside their egos and their differences to work for a common goal (Winitzky et al., 1995).

Hohenbrink, Johnston and Westhoven (1997) also examined co-leadership issues that arose from co-teaching. Three professionals with different work experiences and professional status: a social studies teacher, a graduate

student, and a university professor, examined their co-teaching relationship in detail. They actively dealt with the issues with which they were immediately aware, feelings of intimidation and imposition, power relations, and role definitions, through continuous communication and planning, by practicing equality of power roles and responsibilities, and by documenting how they dealt with these issues. The researchers concluded that co-teaching brought about many changes in the participants' approach to, and their goals for, teaching. Co-teaching also resulted in an appreciation for each other's knowledge and expertise, and particularly, each other's differences (Hohenbrink et al., 1997).

Co-leadership in Outdoor Leadership

Wagstaff (1997) investigated co-leadership of outdoor leaders to determine each leader's level of self-awareness and the effect it had on how the leader perceived her/his co-leaders' influence (power). Wagstaff measured the variable of inner-directedness (I) as one attribute of self-awareness. In this study, inner-directedness was seen as a component of self-actualization. Referent power (when a person is liked or admired) and expert power (based on an individual's knowledge and skills) were studied due to their idiosyncratic connection to personality. The author also investigated the effects of age, sex, level of education, and work experience on self-awareness and power. The premise of the study was to assist in explaining how self-aware leaders influence

co-leader relationships in order to improve the process of outdoor leadership development.

The participants of this study were challenge course instructors who typically facilitated one-day challenge course experiences. The instructors worked in teams of two to five individuals who arrived in advance of groups to plan the day, worked to lead the group throughout the day, and remained afterwards to evaluate the experience. Each participant completed a Definition Response Inventory and a Personal Orientation Inventory to assess self-awareness, and a Rahim Leader Power Inventory to assess co-instructors' perception of power.

The results of this study indicated that perceptions of expert power were directly correlated to the attribute of inner-directedness. Outdoor leaders who were perceived as having a strong expert power base were more self-aware than leaders who were perceived as having a weaker expert power base. In addition: 1) There was a significant relationship between perceptions of expert power and age. There was also a significant relationship between inner-directedness and age. As an outdoor leader's age increased, her/his inner-directedness increased. 2) There was a significant relationship between individuals' inner-directedness and work experience. As the number of years of work experience increased, inner-directedness increased. 3) There was a significant relationship between perceptions of expert power and level of education. As level of education increased, outdoor leaders' expert power increased. 4) Perceptions of power

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were equal among women and men. This finding was explained by the gender equity that was modeled and taught within the research subjects' organization.

Several important implications were deduced from the results of this study. First, self-awareness may be the psychological construct that allows leaders to access the interpersonal skills necessary to develop competent people skills. Secondly, increased knowledge and understanding of outdoor leaders' emotional development can aid in explaining feelings and behaviors, which in turn can assist in positive changes in co-leader relationships. Thirdly, increased awareness of power through the assessment of power indices could aid in explaining co-leader relationships, staffing patterns and organizational culture. Self-awareness, then, may be a critical component that dictates how a leader influences relationships when in a leadership role (Wagstaff, 1997).

Studies have investigated individual variables (sex, birth order, interpersonal orientation, self-awareness, personality traits, age, level of education, and work experience) thought to make effective co-leader partnerships, and to result in satisfaction with the co-leader team (Alfred, 1992; Nosko & Wallace, 1997; Silberstein, 1981; Wagstaff, 1997). Researchers have also investigated the difficulties and complexities of co-leadership (Kolodny, 1980; Tuckman & Finkelstein, 1999; Waldman, 1980). The belief among therapists and educators that the dynamics occurring in the leader partnership will be reflected in the interactions and behaviors of the group members has led to studies that focus on evaluating co-leadership as a process (Hohenbrink et al., 1997; Stempler, 1993; Winitzky et al., 1995; Winter, 1976). Researchers have

broken the process down into stages, looked at behaviors that would help achieve each stage, and then determined methods for learning these behaviors. One area of behavior that is given a lot of attention is the area of interpersonal skills. Many of the above studies focus on the development of interpersonal skills for effective co-leadership (Hohenbrink et al., 1997; Stempler, 1993; Tuckman & Finkelstein, 1999; Winitzky et al., 1995).

The studies reviewed here stress that effective co-leadership is difficult and time consuming, and requires the learning of new skills. In order for effective co-leadership to occur, equality and respect for one another, and respect and appreciation for each other's differences must be present. This develops over time through increased self awareness, commitment, and a strong desire by all to achieve the goal.

Q-Methodology

Outdoor leadership literature has categorized leadership skills into three main categories: technical, interpersonal, and conceptual (Galpin & McEwen, 1987; Jordan, 2001; Priest, 1987; Riggins, 1985; Swiderski, 1981). It has also deemed personality traits and the outdoor environment important to leadership (Buell, 1978; Jordan, 1989; Priest, 1987; Riggins, 1985). However, the individual skills and traits that compose these categories are subjective in that they change, or their order of importance changes, with each study (Buell, 1978; Galpin & McEwen, 1987; Priest, 1987; Riggins, 1985; Swiderski, 1981). Wagstaff (1997),

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in his review of studies of quality outdoor leader competencies, noted the authors' concerns about evaluating skills and traits due to their subjectivity.

The topic of subjectivity is prominent in co-leadership studies (Borthwick, 1995; Borthwick, Stirling & Cook, 2000; Borthwick, Stirling, Nauman, Bishop & Mayer, 2001; Waldman, 1980). Kolodny (1980), after listing criteria for choosing a co-leader, stated that finding the perfect person would take "something akin to wizardry" (p. 34). Studies also vary in identifying the skills necessary for effective co-leadership (Hohenbrink et al., 1997; Nosko & Wallace, 1997; Tuckman & Finkelstein, 1999; Wagstaff, 1997; Waldman, 1980; Winter, 1976). However, being "in sync", working for a common goal, and persistence seem to be skills and traits that are agreed upon as necessary for effective co-leadership (Hohenbrink et al., 1997; Nosko & Wallace, 1997; Stempler, 1993; Winitzky et al., 1995).

Stephenson (1975), in his work with Q-methodology, defined subjectivity as "the condition of viewing things exclusively through the medium of one's mind" (p.100). McKeown and Thomas (1988) were in agreement: their definition of subjectivity was "a person's communication of his or her point of view" (p. 12). The research involving leader and co-leader skills and traits illustrates the wide range of human subjectivity regarding beliefs about leadership and co-leadership.

As previously stated, there is currently no published study examining co-leadership of outdoor expedition leaders. The research reported in this study attempts to reveal outdoor leaders' personal beliefs about important leader and

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co-leader skills and traits. This will be accomplished through the use of Q-methodology. Q-methodology was designed to provide a foundation for the systematic study of human subjectivity (Brown, 1993). As Brown stated, "Only subjective opinions are at issue in Q, and although they are typically unprovable, they can nevertheless be shown to have structure and form, and it is the task of Q-technique to make this form manifest for purposes of observation and study" (1986, p. 58).

Q method is based on the conversation, commentary, and beliefs, both verbal and written, of everyday life. Q method begins with the development of a concourse. The concourse is a population of statements collected from personal interviews, written narratives, publications, and/or conventional or standardized rating scales that reflect peoples' points of view and/or current beliefs and theories of specialists in the area being studied. From this discourse (concourse), a sample of statements is drawn for administration of a Q sort in which participants rank order the statements along a continuum according to their beliefs concerning the importance of each statement (Brown, 1993). Q method then gives quantitative structure and form to these qualitative, subjective opinions (McKeown & Thomas, 1988).

Variables in the Q method consist of the participants rather than the Q sample statements. Factor analysis is used to determine how many different factors, or opinions, exist. The represented points of view are loaded on a factor depending on the magnitude of association with that factor. Each statement is then scored through the construction of a factor array and a determination is

made as to which statements in the arrays are statistically different for any pair of given factors. Finally, Q method returns to the qualitative realm and focuses on assessing emerging theories or patterns (McKeown & Thomas, 1988).

Related Q-Methodology Research

Related Q-methodology research was found primarily in the area of education. Some studies investigated teachers' beliefs and attitudes on various aspects of teaching. Parker (1995) conducted a study to investigate high school physical education teachers' definitions of effective teaching, and determine an importance ranking of the items contributing to effective teaching. The subjects were fourteen veteran physical education teachers recruited on a voluntary basis from middle and high schools in the northwestern United States. Parker collected statements of definitions of effective teaching from the teachers using Flanagan's Critical Incident Technique (Flanagan, 1954). Twenty-one statements were then ranked by the teachers using the Q-sort technique. The rank orders were analyzed by Kendall's coefficient of concordance (W).

Parker concluded that the ranking the teachers provided was hierarchical. The teachers' ultimate goal was student success. However, in order for students to achieve success, certain items first had to be in place. Teachers were mainly concerned with organization, management, discipline, and control. Teachers believed if these were in place, students would then be successful (Parker, 1995).

Sorting was used in one instance to determine the specific problem areas in organizational training and development of personnel. Companies were increasingly accepting the responsibility for professional development and training of employees to improve job performance and to help workers stay abreast of rapidly changing technology affecting their jobs. In order to enhance corporate training effectiveness, companies wanted to identify problems encountered by training and development personnel that had an impact on the training process (Davis & Chaney, 1993). Davis and Chaney (1993) conducted a study to determine the most characteristic problems of corporate training and development practitioners as perceived by trainers, their managers, and trainees.

Study subjects were 120 training personnel, managers, and trainees in various service organizations of education, government, and the health care field. Participants ranked statements using the Q-sort technique. The Q-sort was comprised of fifty statements compiled from a previous American Society for Training and Development study. The statements were classified into four categories or problem areas: technical competencies, business competencies, interpersonal competencies, and intellectual competencies.

Goodman and Kruskal's formula was used to calculate a coefficient of association for the Q-sort rankings of the four categories (Goodman & Kruskal, 1979). Further qualitative analysis of the associations was not performed. No single problem area presented problems for the trainers, managers, or trainees of the various organizations. The researchers concluded that problems of training and development personnel appeared to be related more to the individual than to

any one group of training practitioners. The study provided specific recommendations to improve training effectiveness (Davis & Chaney, 1993).

Other authors investigated partners' beliefs and expectations of the educational partnerships with which they were involved (Borthwick, 1995; Borthwick, Stirling & Cook, 2000). In the early 1990s, educational partnerships were formed as a vehicle for school reform and restructuring. These partnerships received national attention, and as a result, there became a need for the systematic study of partnerships. The intent was to create a knowledge base about how to establish and maintain effective partnerships. In Borthwick's 1995 study of partnership development, a case study design (Merriam, 1988) was used to describe the partnership process of the Cooperative Alliance for Gifted Education (CAGE). CAGE consisted of three organizations serving as partners; an urban school district, a state university and a corporation that produced and marketed educational technology. The four- year partnership was designed to integrate inquiry learning and the use of technology in the K-12 curriculum and to study the development of the partnership. Borthwick (1995) examined the members' expectations of the partnership process, how they evaluated the process, how they defined their roles and the roles of other members, and why the members stayed involved in a partnership process. Ten subjects participated in the study: three CAGE partners, three members of a Joint Partnership Advisory Council (JPAC), and four local partnership process experts.

The Q-sort was one of four methods of gathering data. The Q-sort contained 71 statements collected from interviews of the CAGE partners and

JPAC members. Additional data were gathered by interviews, audio and video tapes of meetings, and the project director log. The data were analyzed using Glaser and Strauss' 1967 constant comparative method (Glaser & Strauss, 1967, as cited in Borthwick, 1995).

Answers to the research questions resulted in the development of a model of educational partnership process. The model was composed of thirteen categories: goals, context, outcomes, member characteristics, commitment, roles and responsibilities, funding and other material resources, connections and exchanges, communications, decision making and action planning, group dynamics, inquiry, and stages. The model represented the complex and dynamic nature of an educational partnership. Members and resources make up the center of the model. Communications, decision making/action planning, group dynamics and inquiry are the interactions through which members manage and monitor the partnership process. The central focus on shared goals maintains member commitment and sustains the partnership (Borthwick, 1995).

In the late 1990s, partnerships between Chicago Public Schools and Chicagoland University were developed to create Professional Development Schools and to obtain grant funding. Borthwick, Stirling & Cook (2000) explored members' perceptions of the elements required for the success of these school-university partnerships. Thirty-four subjects, participants from ten school-university partnerships, were involved in the study. The subjects included principals, an assistant principal, teachers, university partnership coordinators, and directors from the university's center for collaborative activities. The

methodology involved the development of a structured Q-sample of 54 items. The Q-sample was developed based on Borthwick's 1995 educational partnership model. It contained statements in the thirteen categories of the model.

Participants sorted the 54 statements along a continuum of "most necessary" to "most unnecessary" to establishing and maintaining a successful school-university partnership. They then completed a brief interview discussing their placement of Q-sort items. The Q-sorts were analyzed using PQMethod2.06 (Schmolck, 2000). Twenty-three participants clustered into one of five factors. This suggested that the individuals operated in one of five ways within the educational partnerships. Participants were either: 1) oriented to short term goals, as opposed to the long term partnership; 2) interested in the survival of the partnership more than achieving short term goals; 3) interested in the partnership as a dynamic process; or 4) focused on effective interactions within the partnership. The researchers were unsure about how to interpret factor five. They felt they needed the help of participants in interpreting this factor. The researchers discussed participant's perceived advantages and disadvantages of the school-university partnership. The authors concluded that the majority of participants believed the Q-sort had potential as a diagnostic instrument for improving the partnership (Borthwick, Stirling & Cook, 2000).

Borthwick et al. (2001), continued the previous study to further increase the understanding of how school-university partnerships were established and maintained. The 34 subjects from the previous study were placed into focus

groups of their peers and asked to interpret the data. It was believed that the use of focus groups would enable the authors to share their information, help all those involved to better understand each others' perspectives, check the conclusions of their analyses, and clarify poorly understood results. All five focus groups were asked to name each of the five factors in a manner that would help explain each factor's perspective on educational partnerships, and to describe how they believed each group (factor) thought successful partnerships should work. Of the original thirty-four subjects, fourteen fully participated in this continuing study.

The outcomes of the study included: 1) a consistency in the names derived by the focus groups for each of the five factors; 2) focus groups' reinforcement of the differences in perspectives of partners in schools on probation vs. schools in voluntary partnerships; 3) reflections on the role of trust in establishing and maintaining educational partnerships; and 4) the identification of each of the factors as different stages of the partnership development. The investigators concluded that school-university partnerships were here to stay; therefore, it was important to develop methods to engage partners in discussing and reflecting on their partnership processes. The use of Q-Methodology, where participants were both subjects and interpreters of the research, was seen as one successful method (Borthwick et al., 2001).

Related research using Q-methodology was found primarily in the area of education. Researchers have investigated teachers' beliefs and attitudes on various aspects of teaching. Researchers have also investigated educational

partnerships. Researchers believe that educational partnerships are here to stay, and it is important to develop methods to engage partners in discussing and reflecting on their partnership processes. It is believed that Q-methodology has potential as a diagnostic instrument for improving partnerships.

Summary

Much of the research in general leadership theory has been in the area of business. Researchers believe that certain personality traits are related to effective leadership. However, it is sometimes difficult to show this relationship through quantitative studies. Researchers also continue to explore the realm of behavior in relation to leadership. Leader behaviors are believed by some researchers to be the most important factor in helping organizations to be successful. Yet other research has explored the situations that play a role on the effectiveness of leadership style and group performance. Two of the most popular current theories, transactional and transformational leadership, have been investigated in relationship to many factors; character traits, identified versus anonymous situations, sex and gender, and universality being a few. As demonstrated by the discussed research, all of the leadership theory constructs are still in practice. Leadership theories are often investigated in part, and in combination.

Much of the outdoor leadership research has focused on the technical skills, environmental skills, human relations skills, conceptual skills, and

personality traits required for outdoor leadership and leadership training. These studies differ in their conclusions as to the hierarchy of each of these categories (which are influenced by the primary goals of the trip), and as to exactly what skills and traits constitute these categories. However, researchers believe unanimously that these specific skills and traits, in various combinations, are necessary for outdoor leaders to be effective.

Co-leadership research, mainly in the areas of group therapy and education, has investigated individual variables (sex, birth order, interpersonal orientation, self-awareness, personality traits) thought to make effective co-leader partnerships, and to result in satisfaction with the co-leader team. Researchers have also investigated the difficulties and complexities of co-leadership. The belief among therapists and educators that the dynamics occurring in the leader partnership will be reflected in the interactions and behaviors of the group members has led to studies that focus on evaluating co-leadership as a process.

Researchers have divided the process into stages, looked at behaviors that are believed to help achieve each stage, and then determined methods for teaching/learning these behaviors. One area of behavior that has been given a lot of attention is the area of interpersonal skills. Many co-leadership studies have focused on the development of interpersonal skills for effective co-leadership.

Related research using Q-methodology or related Q-sorting techniques was found primarily in the area of education. Studies have investigated teachers'

beliefs and attitudes on various aspects of teaching. Studies have also investigated educational partnerships. Researchers believe that educational partnerships are here to stay, and it is important to develop methods to engage partners in discussing and reflecting on their partnership processes. It is believed that Q-methodology has potential as a diagnostic instrument for improving partnerships.

CHAPTER THREE

Method

The purpose of this study was to determine the skills and traits outdoor adventure trip leaders perceived to be most important in their co-leaders on an extended expedition. The procedures of Q methodology may not be known to the reader. For this reason, an overview of Q methodology is first presented. Chapter 3 contains sections describing the research method, research instrument, participants, procedures, and data analysis used to carry out the study.

Research Method

Q-Methodology

    concourse development. Q-methodology begins with the development of a concourse. The concourse is a population of statements which can come from either a "naturalistic" or a "readymade" source. Naturalistic statements are collected from personal interviews and/or written narratives and have the advantage of providing information that reflect each participant's point of view. These statements are the beliefs of the interviewee, not those of the researcher or other professionals in the field. As a result, they have the potential to provide new and innovative ideas. Readymade statements are those collected from

written sources, such as publications and conventional or standardized rating scales. These statements reflect the current beliefs and theories of specialists in the area being studied. The statements can also be a combination of the two sources, a "hybrid" of statements (McKeown & Thomas, 1988).

Q-sample. Next in the process, a number of the statements are selected from the concourse to become the Q-sample. The statements are selected to represent the wide range of opinions and beliefs that are relevant to the topic being investigated. There are two techniques for choosing the items, the unstructured and the structured sampling techniques. In the unstructured sampling technique, the items relevant to the topic are chosen randomly. As a result, all the issues may not be represented. It is a reasonably accurate survey of beliefs about the topic (McKeown & Thomas, 1988). In the structured sampling technique, the samples are composed more systematically in order to ensure all the issues are represented. The statements are organized either under headings that are based in theory or in a hypothesis (deductive design), or under headings which emerge from the patterns that are observed as the statements are collected (inductive design) (McKeown & Thomas, 1988).

Q-sort. Through the process of sorting, the Q-sample takes on meaning because the participants' views are placed in an array that will, through data analysis, reveal the relationships among the statements and the sample of participants. Each participant models her/his subjectivity by rank ordering the Q-sample statements on a score sheet according to specific conditions of instruction. Participants rank order the statements along a continuum according

to their beliefs concerning the importance of each statement (Brown, 1993). Each statement is a separate item uniquely marked for identification purposes. The score sheet contains a table which has one empty cell for each Q-sample item. The columns of cells are in the form of a platykurtic normal distribution. The center column is represented by zero, the columns to the left are represented by negative numbers, and columns to the right by positive numbers. The positive numbers correspond to the statements most like the participants' own views; the negative numbers to views most unlike their own; the zero column to views that are neither neutral, ambivalent, or uncertain. Each participant is given both verbal and written sorting instructions.

person-sample (P-Set.) The group of individuals who participate in the Q-study are referred to as the Person-Sample or P-set. Q methodology is not concerned with how many people believe as they do, but with how and why people believe as they do. Therefore, Q-method was designed for small P-sets, from 1 to 50 participants, in order to study intensively the beliefs, feelings, and opinions of each individual (McKeown & Thomas, 1988). The subjects in the P-set are selected because of their special relevance to the goals of the study. The main consideration in their selection is that their views are operant in the Q-sample; statements in the Q-sample must have meaning for the P-set (McKeown & Thomas, 1988).

analysis of data. Q-methodology addresses the qualitative and the quantitative realms. The role of mathematics in Q-methodology serves primarily to prepare the data to reveal the patterns of beliefs of the research participants

(McKeown & Thomas, 1988). The Q sorts are correlated to form a correlation matrix that reveals the degree of similarity or dissimilarity of each participant's perspective (as represented by the way they have each sorted the statements) (Brown, 1993). Next, the correlation matrix is factor analyzed to determine the number of different factors (Brown, 1993). This tells the researcher how many different Q sorts are in evidence; how many distinct points of view there are in the P-set.

In Q method, factors are not chosen purely by statistical criteria. The researcher must also take into account the social and political setting to which the factor is connected (Brown, 1980). Although a factor may not be significant statistically, it may be important theoretically because it reveals an additional important point of view, and would therefore necessitate its inclusion in the study. An individual's positive loading on a factor indicates her/his shared subjectivity with others on that factor. Negative loadings are signs of the rejection of that factor's perspective (McKeown & Thomas, 1988).

The original factors are rarely interpreted as is. They are rotated, or repositioned, in order to change the vantage point from which the data are viewed. The factors are repositioned to focus them on a particular factor in order to highlight the connection between the views of the Q sorters (Brown, 1993). In factor rotation, theoretical significance, as well as statistical significance must be considered. Brown (1993) indicated that theoretical rotation often leads to results which are quite at variance with those produced by conventional means.

Instrument Development

In this study, a concourse of approximately 120 statements was developed from outdoor and co-leadership research articles. The Q-sample statements were chosen using a structured sampling technique with a deductive design based on theoretical considerations. The statements were placed under five main headings: technical skills, interpersonal skills, conceptual skills, environmental skills, and personality traits. Three of these headings were based on literature that divided leadership skills into three main categories: technical, interpersonal, and conceptual (Buell, 1981; Galpin & McEwen, 1987; Jordan, 2001; Priest, 1987; Swiderski, 1981). The environmental category was substantiated by Jordan's (1989) C-I-E Theory, which postulated that the environment in which outdoor leadership occurred was of utmost importance and needed to be taken into account. The trait category was based on literature that investigated the personality traits important to leadership (Buell, 1981; Easley, 1985; Jordan, 2001; Priest, 1987; Riggins, 1985). This organizational scheme helped to develop a Q-sample that was diverse and covered an array of beliefs. Forty-four statements were selected from the concourse to be the pilot Q-sample (See Appendix A).

To test the Q-sample, score sheet, and conditions of instructions, a pilot study was conducted with seven outdoor trip leaders from southern Ontario, Canada. Participants met a minimum requirement of having led at least one weekend long trip (at least one night) in the outdoors, away from urban areas, with a co-leader.

The Q-sorts were done on an individual basis. Before the sorting process began, the researcher reiterated that the primary reason for the pilot Q-sort was to help further develop the instrument, and reassured the participants that any comments, questions, and feelings about the sort process and content were greatly valued. The sort directions were read out loud and a copy was then handed to the participant (Appendix B). Each subject also received an envelope containing forty-four Q-sort items (Appendix A), and a score sheet (Appendix C). Upon completion of the sorting process, general feedback on the instrument and the participants' experience was generated. Institutional Review Board approval for research involving human subjects was not required for the pilot study because the subjects' feedback was used only to modify and improve the instrument.

PQMethod2.09 freeware was used to statistically analyze the data. When a Varimax rotation was performed, three independent factors emerged. This indicated that the statements were diverse and salient enough to generate more

than one factor from the pilot P-set. No further analysis of the data was performed.

Q-Sample

From the comments and concerns voiced by the pilot P-set, several modifications were made to the pilot Q-sample.

First, five statements that had a z-score of zero across all three factors (which indicated a non-controversial statement) were removed. The items removed were:

- Item 4 "proper selection and care of equipment and clothing,"
- Item 20 "ability to encourage leadership in others,"
- Item 25 "ability to inspire a shared vision,"
- Item 29 "respect for trip environment,"
- Item 40 "self confidence."

Secondly, four of the statements were combined to create two new, broader statements:

- Item 6 "ability to teach skills" and Item 33 "ability to teach others about the outdoors" were combined to read "making sure people are constantly learning,"
- Item 30 "knowledge of environment where trip is occurring" and Item 32 "familiarity of environment where trip is occurring" were combined to read "knowledge of, and familiarity with the trip environment."

This reduced the Q-sample from 44 to 36 statements. "Teaching" items 6 and 33 both had a z-score of zero across all three factors, indicating they were non-controversial statements. In order to keep a "teaching" item in the Q-sample that was more controversial and distinct, the statement "making sure people are constantly learning" was included.

Thirdly, the wording of seven statements was changed to make them appear more distinct and controversial:

- Item 1 "safety minded" was changed to "safety minded above all else,"

- Item 2 "ability to handle wilderness emergency situations" was changed to "ability to handle wilderness emergency/crisis situations,"

- Item 5 "outdoor living skills, eg. shelter construction, backcountry cooking," was changed to "outdoor living/survival skills, eg. shelter construction, backcountry cooking,"

- Item 9 "promote the fun in tasks" was changed to "promote the fun in tasks, because people are more engaged when they are having fun,"

- Item 11 "empathy, genuine caring" was changed to "empathy, genuine caring for all things,"

- Item 36 "a good sense of humor" was changed to "a positive and timely sense of humor,"

- Item 44 "emotional maturity" was changed to "emotional maturity as opposed to actual age."

With the removal and combining of statements, the numbers in each category changed as follows:

1. technical skills— from 7 to 6 statements,

2. interpersonal skills— from 10 to 9 statements,

3. conceptual skills— from 10 to 8 statements,

4. environmental skills— from 8 to 5 statements, and

5. traits— from 9 to 8 statements.

The Q-sample for the proposed study (Appendix D) was as follows:

1.   safety minded above all else

2.   ability to handle wilderness emergency/crisis situations

3.   ability to read map and compass

4.   outdoor living/survival skills, e.g. shelter construction, backcountry cooking

5.   making sure people are constantly learning

6.   technical skills to match trip environment

7.   provide constant support

8.   promote the fun in tasks, because people are more engaged when they
        are having fun

9.   ability to create a balance, e.g., energy, mood

10.   empathy, genuine caring for all things

11.   ability to effectively handle personal conflict

12.   ability to put aside ego to work for a common goal

13.   being 'in sync', ability to build a synchronous relationship

14.   being 'real' with each other, exhibiting honesty and integrity, being
        unpretentious

15.   ability and willingness to communicate openly

16. promote a sense of community and cooperative spirit, think in terms of "we" not "I"

17. enable others to realize a higher level of potential

18. self-actualizer, constant effort to maximize personal growth by always learning

19. self awareness, knowing how one's self will think, feel, and act in different situations

20. ability to share ownership of problems and solutions

21. a good decision maker

22. continually view surroundings from new perspectives

23. a large measure of creativity

24. high level of comfort in the outdoor environment

25. knowledge of, and familiarity with the trip environment

26. passion/love for the outdoors

27. personal environmental philosophy and values/ethics

28. knowledge of organization's philosophy, policies and procedures concerning environment

29. a positive and timely sense of humor

30. calmness, patience

31. charisma

32. ability to be flexible with leadership style

33. must be 100% trustworthy and dependable

34. top physical condition

35. courage

36. emotional maturity as opposed to actual age

Q-Sort

The conditions of instruction and sort directions of the pilot study were not altered on the final version. In this study there were two conditions of instruction by which each participant sorted the Q-statements:

1. What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?

2. What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?

Please refer to Appendix E for Q-sort directions and Appendix F for the score sheet.

Participants

The P-set (research participants) was seventeen people who were outdoor expedition leaders. According to Brown (2001), the ideal number of participants for this Q-methodology study is 1/2N-1, where N equals the number of Q statements. There were seventeen research participants in this study, and thirty-six Q-statements. Each participant must have led a minimum of one, ten day outdoor expedition to be considered for inclusion in this study. This duration was based on Cashel's 1994 study where ten-day trips were long enough to

engage leader/participant interactions. The P-set was chosen from a purposeful sample of outdoor leaders located in southern Ontario, Canada. Research participants were selected to represent diversity of age, sex, ethnicity, level of education, and years of experience.

Procedures

A sample of outdoor expedition leaders in southern Ontario, Canada was asked to participate in this study. Leaders were selected by the snowball technique. Each participant was asked if they would spend approximately one and a half hours with the researcher sorting 36 statements about their views as to: 1) what are the most important skills and traits for them to possess as a leader?, and 2) what are the most important skills and traits for a person who will co-lead with them, on an extended expedition?

The researcher met with each participant individually and presented her/him with a Consent Form (Appendix G). The Consent Form requested permission to record, in writing, the participants' verbal comments as they sorted the items, and after completion of the sort. If she/he agreed to proceed, the participant then completed an Information Sheet (Appendix H). Each subject then received an envelope containing 36 Q sort items and a matrix score sheet. The Q-sort directions were read aloud by the researcher to each participant before she/he began the sorting process. Participants were encouraged to share their thoughts and feelings as they sorted the items. All information was kept strictly

confidential in accordance with the requirements of the Institutional Review Board for research involving human subjects.

Field notes were taken during the Q-sort process. The interview data plan was to elicit quotes that related to the research questions. Verbatim quotes were repeated to the subject and altered based on interview feedback. Probes were used to elicit specific information related to apparent reactions to Q-sort items. For example, if a subject read an item and made a comment such as "courage, I've had many a discussion about courage," the researcher would ask, "What is it about courage you discussed?"

Data Analysis

The statements were sorted by two conditions of instruction. The first condition of instruction was asked in order to provide a foundation for the second condition of instruction. After the Q-sorting process was completed, a statistical analysis of the data was conducted using the computer program PQMethod2.09. PQMethod2.09 was designed to analyze Q-sorts and the rotation of factors. A Varimax rotation of factors was completed in order to interpret the views and patterns of beliefs held by outdoor adventure leaders concerning skills and traits of co-leaders on extended expeditions. Upon completion of the rotation, the analysis returned to a qualitative interpretation of the results as per Q-methodology.

For the qualitative data analysis, the field notes taken during the Q-sort

process were used to support the factor analysis.

CHAPTER FOUR

Results

The purpose of this study was to determine the skills and traits outdoor adventure trip leaders perceived to be most important in their co-leaders on an extended expedition. Q-methodology was used to conduct the research.

This chapter contains a statistical analysis report followed by an interpretation of the results as they relate to the three research questions: 1) What are the most important skills and traits for outdoor leaders and co-leaders to possess on an extended expedition? 2) How do leaders' perceptions of their own important characteristics differ from their preferences of characteristics for co-leaders? 3) What relationships exist among the beliefs of outdoor leaders and their demographic attributes such as age, sex, occupation, level of education, number of years of leadership experience, and the primary goals of their trip?

Seventeen wilderness trip leaders completed Q-sorts by two conditions of instruction: 1) "What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?" and 2) "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?" This produced a total of thirty-four Q-sorts. The

results from the analysis of the 34 Q-sorts using PQMethod2.09 are presented in this chapter.

Statistical Analysis

The Q-sorts were correlated, and the 34 x 34 correlation matrix was factor analyzed using a principal components factor analysis (see Appendix I). Three factors were extracted and a varimax rotation was then completed. A three-factor solution was chosen over a two factor solution because three factors accounted for eight percent more variance than the two-factor solution. The three-factor solution accounted for 49 percent of the variance (Factor 1 = 18%, Factor 2 = 19%, Factor 3 = 12%). Three factors were selected over four factors because three factors had the larger number of significant Q-sorts. Twenty-nine of the thirty-four completed Q-sorts had significant loadings on the three-factor solution. A defining sort was determined by the default formula: a) $a^2 > h^2/2$ (factor explains more than half the common variance), and b) $a > 1.96/n$ items (loading significant at $p > .05$).

Of the 29 significant Q-sorts, ten loaded on Factor 1, fourteen loaded on Factor 2, and five loaded on Factor 3 (Table 1). Of the five sorts that did not achieve the criteria for the formula, Q-sorts 13MaleCo-Leader (MCL) and 14MaleLeader (ML) had a high association with all three factors, whereas three (04FemaleLeader (FL), 05FemaleCo-Leader (FCL), 06FL) did not appear similar on any of the three factors; furthermore, they were non-significant Q-sorts.

Table 1

Factor Loadings of Research Participants

Q-Sort	Factor 1	Factor 2	Factor 3
01ML	-0.1121	0.7948*	0.0894
01MCL	-0.1121	0.7948*	0.0894
02ML	-0.0226	0.69268*	-0.1032
02MCL	0.2783	0.5539*	-0.3007
03FL	0.0697	0.6488*	-0.3501
03FCL	0.2139	0.61468*	-0.2233
04FL	0.1561	0.1461	0.1157
04FCL	0.6143*	-0.1541	0.1564
05FL	0.1006	0.3459*	0.1561
05FCL	-0.0076	0.3190	0.2196
06FL	0.0880	0.3257	0.2615
06FCL	0.5368*	0.2990	0.2327
07FL	0.5413	0.5621*	0.1262
07FCL	0.8075*	0.2017	0.1611
08ML	0.0730	0.1442	0.8481*
08MCL	0.0730	0.1442	0.8481*
09ML	0.2086	0.7890*	-0.0431
09MCL	0.3963	0.5871*	0.3013
10ML	0.2040	0.1204	0.6259*

Q-Sort	Factor 1	Factor 2	Factor 3
10MCL	0.4283	0.0083	0.5969*
11ML	0.5206*	0.2322	0.1199
11MCL	0.6819*	0.1198	0.4124
12FL	0.7099*	-0.1729	-0.2187
12FCL	0.7574*	-0.0629	-0.1152
13ML	0.3985	0.4776*	-0.0269
13MCL	0.5265	0.4279	0.3286
14ML	0.4793	0.4067	0.5113
14MCL	0.7225*	0.1748	0.3134
15ML	-0.0929	0.5493*	0.2430
15MCL	0.1506	0.4649*	0.2511
16FL	0.0900	0.5792*	0.2331
16FCL	0.7024*	0.2419	0.2829
17FL	0.2077	-0.1598	0.5096*
17FCL	0.4998*	-0.1310	0.4117

* = significant Q-sort   L = leader   CL = co-leader   F = female   M = male

Further data analysis revealed that all seventeen of the research subjects had significant loadings with one or both Q-sorts on at least one of the three factors; twelve subjects loaded significantly on both conditions of instruction, and five subjects loaded significantly on one of the two conditions of instruction (Table 1).

Factor Arrays

Three factors or points of view emerged from the views of the research participants' 34 Q-sorts. The factors were extracted by the quantitative analysis of the data. The interpretation of the views represented by the three factors must include multiple sources of information. The statistical analysis of the thirty-four Q-sorts was supported by the Q-statements in the "most like" and "most unlike" positions of each composite factor array (Table 2), the distinguishing statements of each factor, the Q-sort interviews, and post-sort question. The interpretations are presented below within subsections for each factor.

Table 2

Factor Array with Z-scores

Q-Sample Statements	Factor 1		Factor 2		Factor 3	
	z*	ap**	z	ap	z	ap
1. safety minded above all else	0.518	1	1.082	3	0.617	1
2. ability to handle wilderness emergency/crisis situations	1.270	3	2.162	4	-1.051	-3
3. ability to read map and compass	-.526	-4	1.024	2	-.921	-2
4. outdoor living survival skills, e.g., shelter construction, backcountry cooking	-1.427	-3	0.963	2	-1.521	-3
5. making sure people are constantly learning	-0.204	0	-1.223	-3	-0.979	-2
6. technical skills to match trip environment	-0.431	-1	1.490	4	1.118	3
7. provide constant support	0.483	1	-0.663	-2	-1.405	-3
8. promote the fun in tasks, because people are more engaged when they are having fun	-0.244	-1	-0.794	-2	-0.406	-1
9. ability to create a balance, e.g., energy, mood	0.191	0	-0.975	-3	-0.814	-2

Q-Sample Statements	z^*	ap**	z	ap	z	ap
10. empathy, genuine caring for all things	0.067	0	-1.483	-4	-0.189	-1
11. ability to effectively handle personal conflict	0.556	1	1.106	3	0.044	0
12. ability to put aside ego to work for a common goal	0.490	1	0.186	1	0.010	0
13. being 'in sync', ability to build a synchronous relationship	0.593	1	-1.080	-3	0.744	2
14. being 'real' with each other, exhibiting honesty and integrity, being unpretentious	1.416	4	-0.462	-1	1.194	3
15. ability and willingness to communicate openly	1.400	4	0.044	0	1.027	2
16. promote a sense of community and cooperative spirit, think in terms of "we" not "I"	0.852	2	-0.441	-1	1.702	4
17. enable others to realize a higher level of potential	0.193	0	-0.192	0	0.894	2
18. self-actualizer, constant effort to maximize personal growth by always learning	-0.715	-1	0.051	0	0.073	0

Q-Sample Statements	z*	ap**	z	ap	z	ap
19. self awareness, knowing how one's self will think, feel, and act in different situations	-0.552	-1	-0.898	-2	0.213	0
20. ability to share ownership of problems and solutions	0.848	2	0.696	1	0.237	1
21. a good decision maker	1.372	3	1.363	3	1.475	4
22. continually view surroundings from new perspectives	-1.003	-2	-2.120	-4	-0.225	-1
23. a large measure of creativity	-0.087	0	-0.471	-1	-0.570	-1
24. high level of comfort in the outdoor environment	-0.064	0	1.438	4	1.171	3
25. knowledge of, and familiarity with the trip environment	-1.136	-3	0.794	1	1.452	4
26. passion/love for the outdoors	-0.291	-1	-0.108	0	0.106	0
27. personal environmental philosophy and values/ethics	-0.851	-2	-0.265	-1	-0.567	-1
28. knowledge of organization's philosophy, policies and procedures concerning the environment	-1.261	-3	0.320	1	-1.610	-4

Q-Sample Statements	z*	ap**	z	ap	z	ap
29. a positive and timely sense of humor	0.718	2	0.142	1	-1.761	-4
30. calmness, patience	0.852	2	1.024	2	0.330	1
31. charisma	-0.988	-2	-1.615	-4	-0.904	-2
32. ability to be flexible with leadership style	1.328	3	-0.255	0	0.647	1
33. must be 100% trustworthy	1.910	4	0.800	2	0.613	1
34. top physical condition	-1.895	-4	-0.907	-2	1.043	2
35. courage	-1.533	-4	-0.630	-1	-1.895	-4
36. emotional maturity as opposed to actual age	-0.892	-2	-0.108	0	0.107	0

*z = z-scores   **ap = array position

Research Question 1: What are the most important skills and traits for outdoor leaders and co-leaders to possess on an extended expedition?

Factor 1: The Servant Leaders

Factor 1 research subjects were named the Servant Leaders because they exhibited several of the components described in the literature (Greenleaf, 1977; Spears, 1995) that characterize servant leaders. The role of the servant leader is to serve others, to ensure a good experience for participants, and to help others to grow. They are people who want to help and serve others

(Greenleaf, 1977). The essence of The Servant Leaders is captured in the following quote made by one leader whose Q-sort loaded significantly on Factor 1: "…My ultimate goal is for everyone to have a "positive" experience. Trust and confidence will help me build that…" (12F).

Two of the 17 research participants loaded significantly as "Leaders" on the Servant Leader factor; a citizen of the First Nations and a ministry student. The First Nations trip leader was a female between the ages of 18 and 25 who, because of her native heritage, led cultural trips for Native youth in eastern Canada. Several of her students were "youth at risk." This Ojibway woman comes from a collectivist culture; a culture that is cooperative, communal, intuitive, and spiritual. Her culture respects the ancestors who came before, and focuses on being guardians of the future. The leader's role is to put the people, who are members of the group, before herself while helping the group to reach its potential. The ministry student trip leader was a male between the ages of 26 to 35. He led trips for youths in a church camp. This man belonged to a vocation whose main emphasis is on serving people in order to promote their spiritual well-being.

The research participants defining Factor 1 convey a viewpoint that places primary importance on leaders and co-leaders possessing skills and traits for building and maintaining honest, open, and trusting relationships, and taking care of people, both physically and emotionally, on an extended expedition. The interpretation of this viewpoint is supported by the statements contained in the Servant Leaders' positive array position (Table 3).

Table 3

The Servant Leaders' Ranked and Distinguishing Statements of the Skills and

Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Highest Ranked (Most Agreed With)

Statement No.	Statement	z-Score
33	Must be 100% trustworthy and dependable	1.910
14	Being 'real' with each other, exhibiting honesty and integrity, being unpretentious	1.416
15	Ability and willingness to communicate openly	1.400
21	A good decision maker	1.372
32	Ability to be flexible with leadership style	1.328
2	Ability to handle wilderness emergency/crisis situations	1.270

Six Lowest Ranked (Least Agreed With)

Statement No.	Statement	z-Score
25	Knowledge of, and familiarity with the trip environment	-1.136
28	Knowledge of organization's philosophy, policies and procedures concerning environment	-1.261
4	Outdoor living/survival skills, e.g., shelter construction, backcountry cooking	-1.427
3	Ability to read map and compass	-1.526
35	Courage	-1.533
34	Top physical condition	-1.895

The Servant Leaders' Ranked and Distinguishing Statements of the Skills and

Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Most Distinguishing Statements

Statement No.	Statement	z-Score
33	Must be 100% trustworthy and dependable	1.91
32	Ability to be flexible with leadership style	1.33
2	Ability to handle wilderness emergency/crisis situations	1.27
16	Promote a sense of community and cooperative spirit, think in terms of "we" not "I"	0.85
29	A positive and timely sense of humor	0.72
7	Provide constant support	0.48

Table 3 shows the statements the Servant Leaders most agreed with and the distinguishing statements that separate the beliefs of the Servant Leaders from the other two types of leaders (factors). The skills and traits "most like" the Servant Leaders' point of view are interpersonal skills, and traits that are conducive to trust, good communication, and community. Statements 2 and 21 were interpreted by research subjects to build confidence and trust within the group. One Servant Leader explained, "…having the ability to handle wilderness emergency/crisis situations, and good decision making skills, will build confidence and trust in me and therefore in the group…" (12F).

Factor 2: The Situational Leaders

Factor 2 research subjects were named the Situational Leaders because they exhibited several of the components described in the literature that characterize situational leaders. Situational leaders change leadership styles and behaviors to match changing situations (Hersey & Blanchard, 1974).

The essence of The Situational Leaders was captured in the following quote made by one leader whose Q-sort loaded significantly on Factor 2:

My personal ideals of important skills and traits were in conflict with those skills and traits that are necessary for the company I guide for, and the environment I guide in. For example, in an isolated northern river situation, the technical skills take on a greater value than in a less isolated lake-tripping environment. Ideally, group dynamics and growth would be very important, however, these types of traits must take less of a priority in a more isolated, skill demanding location. Secondly, the outfitter I guide for and the clientele I lead have their own priorities,…the clientele I guide for are often less interested in personal growth and learning than simply experiencing the river while on vacation. (15M)

Nine out of the 17 research participants loaded significantly as "Leaders" on the Situational Leader factor. These nine leaders, four female and five male, had an age range of 18 to 46+ years, had a wide range of years of trip leading experience, and led a variety of groups with a variety of trip goals. Two of the Situational Leaders led trips for private or commercial outfitters; four led youth

groups for educational purposes; two worked for Project DARE leading young offenders, and; one led groups for Outward Bound.

The Situational Leaders of this study appeared to place primary importance on the technical, environmental, and safety skills of leadership. The skills and traits this group believed were most important are seen in the positive array statements of Table 4.

Table 4

The Situational Leaders' Ranked and Distinguishing Statements of the Skills and

Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Highest Ranked (Most Agreed With)

Statement No.	Statement	z-Score
2	Ability to handle wilderness emergency/crisis situations	2.162
6	Technical skills to match trip environment	1.490
24	High level of comfort in the outdoor environment	1.438
21	A good decision maker	1.363
11	Ability to effectively handle personal conflict	1.106
1	Safety minded above all else	1.082

Six Lowest Ranked (Least Agreed With)

Statement No.	Statement	z-Score
9	Ability to create a balance, e.g., energy, mood	-0.975
13	Being 'in sync', ability to build a synchronous relationship	-1.080
5	Making sure people are constantly learning	-1.223
10	Empathy, genuine caring for all things	-1.483
31	Charisma	-1.615
22	Continually view surroundings from new perspectives	-2.120

The Situational Leaders' Ranked and Distinguishing Statements of the Skills and

Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Most Distinguishing Statements

Statement No.	Statement	z-Score
2	Ability to handle wilderness emergency/crisis situations	2.16
11	Ability to effectively handle personal conflict	1.11
3	Ability to read map and compass	1.02
4	Outdoor living/survival skills, e.g., shelter construction, backcountry cooking	0.96
25	Knowledge of, and familiarity with the trip environment	0.79
28	Knowledge of organization's philosophy, policies and procedures concerning environment	0.32

Table 4 shows the strongest opinions of the Situational Leaders. Table 4 also shows the distinguishing statements that separate the beliefs of the Situational Leaders from the other two factors.

It appears that the Situational Leaders focused mainly on the task during a wilderness trip. Unlike Servant Leaders, they do not appear to be too concerned about the group's emotional well-being or in building open, trusting relationships. One leader explained: "The leader should have the necessary technical skills, be physically fit and mentally prepared. These are the main leader skills to have. The emotional, interpersonal skills can be taken care of by someone else" (01M).

Another leader believed: "Being trustworthy and dependable, on top of technical skills, makes a solid leader. I don't care if youths like the other leader better. I just want to be respected. If I'm liked, that's a bonus" (02M). A third leader revealed: "technical skills must be good, otherwise you can't have a trip. Knowing policies is important in order to determine whether or not to terminate the trip" (03F).

Factor 3: The Transformational Leaders

Factor 3 research subjects were named the Transformational Leaders because they exhibited several of the components described in the literature that characterize transformational leaders. The role of the transformational leader is to be a developer of people, community, and of ideas through the use of positive personal characteristics and behaviors (Bass, 1985, 1990, 1997; Bass & Avolio, 1994; Sosik & Megerian, 1999).

The essence of The Transformational Leaders was captured in the following quote made by one leader whose Q-sort loaded significantly on Factor 3: "We push each other to the max, but not past the emotional threshold. If you are emotionally into it, it translates directly to the physical environment. We are both very aware of this" (10M).

Three research participants loaded significantly as "Leaders" on the Transformational Leader factor. Two male leaders, one a teacher between the ages of 36 and 45, the second a doctoral student between the ages of 18 and 25, both led personal mountaineering trips for excitement/adventure, spiritual, and educational/cultural purposes. Trips involved climbing some of the highest peaks in countries around the world. Both of these Transformational Leaders would not

consider going on an extended wilderness expedition with someone they did not know. One explained his reasoning, "I would never go on an extended wilderness trip with someone I didn't know... a trip is not the place to learn what your co-leaders quirks are" (10M). The third Transformational Leader, a female high school teacher between the ages of 36 and 45, led personal hiking trips with groups of people she knew, as well as trips for Outward Bound. This Transformational Leader was willing to lead trips with someone she did not know.

The research participants defining Factor 3 conveyed a viewpoint that places primary importance on the growth and development of the individual, the community, and the trip. The statements contained in the positive array position (Table 5) reflect this viewpoint.

Table 5

The Transformational Leaders' Ranked and Distinguishing Statements of the

Skills and Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Highest Ranked (Most Agreed With)

Statement No.	Statement	z-Score
16	Promote a sense of community and cooperative spirit, think in terms of "we" not "I"	1.702
21	A good decision maker	1.475
25	Knowledge of, and familiarity with the trip environment	1.452
14	Being 'real' with each other, exhibiting honesty and integrity, being unpretentious	1.194
24	High level of comfort in the outdoor environment	1.171
6	Technical skills to match trip environment	1.118

Six Lowest Ranked (Least Agreed With)

Statement No.	Statement	z-Score
2	Ability to handle wilderness emergency/crisis situations	-1.051
7	Provide constant support	-1.405
4	Outdoor living/survival skills, e.g., shelter construction, backcountry cooking	-1.521
28	Knowledge of organization's philosophy, policies and procedures concerning environment	-1.610
29	A positive and timely sense of humor	-1.761
35	Courage	-1.895

The Transformational Leaders' Ranked and Distinguishing Statements of the

Skills and Traits They Believe Outdoor Leaders and Co-leaders Should Possess

Six Most Distinguishing Statements

Statement No.	Statement	z-Score
16	Promote a sense of community and cooperative spirit, think in terms of "we" not "I"	1.70
25	Knowledge of, and familiarity with the trip environment	1.45
34	Top physical condition	1.04
17	Enable others to realize a higher level of potential	0.89
32	Ability to be flexible with leadership style	0.65
30	Calmness, patience	0.33

Table 5 contains the statements the Transformational Leaders most agreed with, and the distinguishing statements that separate the beliefs of the Transformational Leaders from the other two types of leaders (factors). Whereas Servant Leaders placed primary importance on interpersonal relationships, and Situational Leaders placed primary importance on the task, Transformational Leaders appear to place high value on all aspects of the trip. Knowledge of the environment is important, technical skills are important, physical fitness is important, community is important, and personal development is important.

The four major components of transformational leadership are idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1997). Leaders employ idealized influence by displaying positive personal characteristics and behaviors. Statement 14 (being "real" with each other, exhibiting honesty and integrity, being unpretentious) is an example of idealized influence. This statement was placed in the +3 array position. Leaders exhibit inspirational motivation by describing positive visions of the future, challenging followers with high standards, and encouraging them to achieve these high standards. Statements 21 (a good decision maker), 25 (knowledge of, and familiarity with the trip environment), and24 (high level of comfort in the outdoors) are examples of inspirational motivation. These statements were placed in the +4, +4, and +3 array positions. Leaders provide intellectual stimulation by constantly questioning traditions and existing beliefs and assumptions. Statement 16 (promote a sense of community and cooperative spirit, think in terms of "we" not "I") is an example of a different way of viewing leadership which contrasts with the traditional belief in hierarchical leadership. This statement was placed in the +4 array position. Leaders display individualized consideration by treating others as special and unique individuals. Statement 17 (enable others to realize a higher level of potential) is an example of individualized consideration. It is a distinguishing statement for this leadership type.

The Transformational Leaders is the only group of the three factors to categorize some of the skills of this study into "bigger picture" and "inclusive"

skills. This was an indication of viewing things with a wide scope, of seeing a "bigger picture" of what is presented. Four statements contained in the "most unlike" array position were described by Transformational Leaders as being part of the "bigger picture" of two statements on the "most like" array position. Statements 2 (ability to handle wilderness emergency/crisis situations), 3 (ability to read map and compass), and 4 (outdoor living/survival skills, e.g., shelter construction, backcountry cooking) were seen to be included within statement 6 (technical skills to match trip environment). Statement 28 (knowledge of organization's philosophy, policies and procedures concerning environment) was seen to be included within statement 25 (knowledge of, and familiarity with trip environment). As a result of this way of thinking, these four statements were placed in the "most unlike" array positions. In this manner, the importance of these skills was accounted for.

Question 2: How do leaders' perceptions of their own important characteristics differ from their preferences of characteristics for co-leaders?

Table 6 illustrates the nine different relationships of leaders' perceptions of their own important characteristics compared to their preferences of characteristics for co-leaders, as expressed through their Q-sorts. The first number in the pair represents the leader's preference for self. The second number represents the preference for co-leader.

Table 6

Subjects' Perceptions of Their Own Leader Characteristics in Relation to Co-leader Characteristics

Participant	1:1	2:2	3:3	2:1	3:1	2:High on all	High on all: 1	Non-sig:1	2:Non-sig
1		X							
2		X							
3		X							
4								X	
5									X
6								X	
7				X					
8			X						
9		X							

Participant	1:1	2:2	3:3	2:1	3:1	2:High on all	High on all: 1	Non-sig:1	2:Non-sig
10			X						
11	X								
12	X								
13						X			
14							X		
15		X							
16				X					
17					X				
Totals	2	5	2	2	1	1	1	2	1

In column 1:1, two research subjects perceived their own important characteristics to be those of the Factor 1: Servant Leaders. Likewise, they preferred their co-leaders to have similar Factor 1: Servant Leader relationship building skills and traits. These Factor 1: Servant Leaders appeared to view co-leadership as a team effort, with a sharing of the leadership roles. This interpretation was supported by one Servant Leader, who commented: "I want to have confidence in my co-leaders. I want them to be open with me. I want to know what is going on with them. I need this in order to feel like I am sharing the leadership role" (12F). A second participant stated: "The main point is to have a

good, trusting, open relationship with my co-leader. Then we can overcome problems and gain solutions more effectively" (11M).

In column 2:2 (Table 6), five leaders perceived the most desired characteristics for themselves as leaders to be technical, safety, and environmental skills that form a large portion of the Factor 2: Situational Leaders' beliefs. They also preferred their co-leaders to have similar technical and environmental skills. Four of the research participants indicated in their sort interviews that they wanted their co-leaders to provide a balance in leadership. However, this was not evident in the data analysis.

In column 3:3 (Table 6), two individuals in this study perceived their most desired characteristics to be those conducive to building people and communities, and to being a Factor 3: Transactional Leader. They preferred that their co-leaders have similar community and people building skills. These research subjects appeared to view co-leadership as a team effort, which involved consensus. This belief was expressed by one Transformational Leader: "I want my co-leader to believe in community as much as I do. It's important that everyone have a say in what they want to do. Therefore, everyone considers all points of view and discusses the outcome. If someone is not comfortable doing something, they voice this, and it is respected by the group members" (08M).

In column 2:1 (Table 6), two research participants perceived their most valued characteristics to be the technical, safety, and environmental skills that form a large portion of Factor 2: Situational Leaders' beliefs, and preferred their co-leaders to have Factor 1: Servant Leader relationship building skills and traits.

One of the leaders commented in her sort interview that: "interpersonal skills are very important for a co-leader" (16F). The other leader with a 2:1 preference confirmed this, stating: "One thing I've often noticed in instructor pairings is that I work best with people who are very different from me – different style and personality – lets us complement each other" (07F). These Factor 2: Situational Leaders preferred relationship oriented co-leaders typified by Factor 1: Servant Leaders.

In column 3:1 (Table 6), one research participant perceived her important characteristics to be those conducive to building people and communities, and to being a Factor 3: Transactional Leader. This leader preferred her co-leaders to have Factor 1: Servant Leader relationship building skills and traits. The leader commented in her Q-sort interview that: "what is important to me to bring is not necessarily what I want my co-instructor to bring. This is partially because we are a TEAM" (17F). This community building leader preferred a relationship oriented co-leader.

In column 2: High on all three (Table 6), one research subject perceived his important characteristics to be the technical, safety, and environmental skills that form a large portion of the Factor 2: Situational Leader's beliefs. This leader preferred his co-leader to have a combination of relationship building, community building, and technical/environmental characteristics.

In column High on all three: 1 (Table 6), one research participant was a combination of all three factors. He expressed a preference for a co-leader with a combination of relationship building, community building, and

technical/environmental characteristics. This leader preferred his co-leader to have Factor 1: Servant Leader relationship building skills and traits. His comment regarding co-leader relationships may offer insight into his preference: "Leaders should come together as professionals and their stuff should be left at the door. If it comes out, at the appropriate time, then deal with it" (14M).

In column Non-significant: 1 (Table 6), one individual did not load on any of the three factors, and preferred a combination of skills and traits that were different from the other three types of leaders in this study; she preferred her co-leader to have relationship skills that were evident in the Factor 1: Servant Leader. This preference was supported by the leader's comment, "I look for a co-leader who takes care of the emotional bruises while I take care of the physical ones; someone who balances my extreme personality and someone who can check me as well" (04F).

In column 2: Non-significant (Table 6), one leader perceived her important characteristics to be the technical, safety, and environmental skills that form a large portion of the Factor 2: Situational Leaders' beliefs. This leader expressed a preference for a co-leader who has a combination of characteristics that are different from the other co-leaders of this study. The comments of this subject may offer insight into her preference. "I would like to do more trips with co-leaders who are new to me so I can get out of my comfort/familiar zone and do some learning around my co-leadership style" (05F).

Data analysis revealed nine different leader: co-leader preferences: 1) two Servant Leaders preferred Servant Co-leaders, 2) five Situational Leaders

preferred Situational Co-leaders, 3) two Transformational Leaders preferred Transformational Co-leaders, 4) two Situational Leaders preferred Servant Co-leaders, 5) one Transformational Leader preferred a Servant Co-leader, 6) one Situational Leader preferred a co-leader who was a combination of all three styles, 7) one leader who was a combination of all three styles preferred a Servant Co-leader, 8) two leaders who had a style different from the other leaders of this study preferred a Servant Co-leader, and 9) one Situational Leader preferred a co-leader with a style different from the other co-leaders of this study. Nine leaders preferred a co-leader similar to themselves. Eight leaders preferred a co-leader different from themselves.

Question 3: What relationships exist among the beliefs of outdoor leaders and their demographic attributes such as age, sex, occupation, level of education, number of years of leadership experience, and the primary goals of their trip?

Table 7 illustrates the relationships that exist among the nine different beliefs of the outdoor leaders and their demographic attributes of age, sex, highest degree obtained, number of years of work experience, and primary trip goals.

Table 7

Demographic Relationships Among Leader: Co-leader Preferences

	1:1	2:2	3:3	2:1	3:1	2: High on all	High on all:1	Non: 1	2: Non
<u>Age</u>									
18-25	1	3	1	1	0	1	0	1	0
26-35	1	1	0	1	0	0	1	1	1
36-45	0	0	1	0	1	0	0	0	0
46+	0	1	0	0	0	0	0	0	0
<u>Sex</u>									
Female	1	1	0	2	1	0	0	2	1
Male	1	4	2	0	0	1	1	0	0
<u>Highest Degree Obtained</u>									
High school	1	4	0	0	0	0	1	1	0
Associates degree	0	0	0	0	0	0	0	0	0
Bachelors degree	1	1	1	2	0	1	0	1	1
Master's degree	0	0	0	0	0	0	0	0	0
Doctorate	0	0	1	0	1	0	0	0	0
Other	0	0	0	0	0	0	0	0	0

	1:1	2:2	3:3	2:1	3:1	2: High on all	High on all:1	Non: 1	2: Non
Number of Years									
Experience	0	0	1	0	0	0	0	0	0
Less than 1	1	1	0	1	0	0	0	1	0
1-2 years	0	2	0	0	0	1	0	0	1
2-5 years	1	1	0	0	1	0	0	1	0
5-10 years	0	1	1	1	0	0	1	0	0
More than 10 years									
Primary Goal of Trip									
Education	2	3	1	2	1	1	1	2	1
Cultural Development	1	0	1	2	0	0	0	0	0
Rehabilitation	0	0	0	0	0	1	0	0	1
Excitement/Adventure	0	5	2	2	1	0	0	1	0
Other	0	1	1	0	0	0	0	0	0

There were several noteworthy relationships of demographic attributes to beliefs of the outdoor leaders in this study.

1. From a total of three Transformational Leaders, two were older than all the other leaders in this study.

2. The two subjects with the highest level of education were Transformational Leaders.

3. From a total of eight leaders who preferred co-leaders with different characteristics, six were female.

4. From a total of eight leaders who preferred a Servant Co-leader, six were female.

5. From a total of nine leaders who preferred co-leaders with similar characteristics, seven were male.

6. From a total of five Situational Leaders who preferred Situational Co-leaders, four were male.

Summary

Three meaningful factors resulted from the analysis of 34 Q-sorts using PQMethod 2.09. The three factors accounted for 49% of the variance. The research subjects' beliefs about the most important skills and traits for outdoor leaders and co-leaders to possess on an extended expedition were represented by the three factors, and were characterized by the following titles: The Servant Leaders, Situational Leaders, and Transformational Leaders. Of the 29 significant Q-sorts from the P-set, ten loaded as Servant Leaders, fourteen loaded as Situational Leaders, and five loaded as Transformational Leaders. The Servant Leaders' beliefs placed primary importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally. The Situational Leaders' beliefs appeared to place primary importance on the technical and environmental skills and traits of leadership. The Transformational

Leaders' beliefs placed primary importance on developing the individual, the community, and the trip.

Data analysis revealed nine different relationships of leaders' perceptions of their own important characteristics to their preferences of characteristics for co-leaders: 1) two Servant Leaders preferred Servant Co-leaders, 2) five Situational Leaders preferred Situational Co-leaders, 3) two Transformational Leaders preferred Transformational Co-leaders, 4) two Situational Leaders preferred Servant Co-leaders, 5) one Transformational Leader preferred a Servant Co-leader, 6) one Situational Leader preferred a co-leader who was a combination of all three styles, 7) one leader who was a combination of all three styles preferred a Servant Co-leader, 8) two leaders who had a style different from the other leaders of this study preferred a Servant Co-leader, and 9) one Situational Leader preferred a co-leader with a style different from the other co-leaders of this study. There were six noteworthy relationships of demographic attributes to beliefs of outdoor leaders.

CHAPTER FIVE

Discussion, Implications, Conclusions, and Recommendations

Outdoor adventure leadership involves leading activities that have a highly perceived and/or inherent risk into remote places over extended periods of time. It can be a very emotionally, mentally, psychologically, and physically demanding type of leadership (Jordan, 1989). For these reasons, outdoor adventure leaders rarely work alone; they work in leadership teams as co-leaders (Wagstaff, 1997). Research that investigates outdoor adventure leadership exists (Galpin and McEwen, 1987; Green, 1981; Jordan, 1989; Priest, 1985, 1987; Riggins, 1985; Swiderski, 1981; Wagstaff, 1997), however, there is a deficit of research exploring the dynamics of co-leadership in the field. This study was implemented to examine one small part of the co-leadership phenomenon. The purpose of this study was to determine the skills and traits outdoor adventure trip leaders perceived to be most important in their co-leaders on an extended expedition.

Three meaningful factors resulted from the analysis of 34 Q-sorts using PQMethod 2.09. The Q-sorters' beliefs about the most important skills and traits for outdoor leaders and co-leaders to possess on an extended expedition were

represented by three factors. They were characterized by the following titles: The Servant Leaders, Situational Leaders, and Transformational Leaders. Of the 29 significant Q-sorts from the P-set, ten loaded as Servant Leaders, fourteen loaded as Situational Leaders, and five loaded as Transformational Leaders. The Servant Leaders' beliefs placed primary importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally. The Situational Leaders' beliefs appeared to place primary importance on the technical and environmental skills and traits of leadership. The Transformational Leaders' beliefs placed primary importance on developing the individual, the community, and the trip.

Data analysis revealed nine different relationships of leaders' perceptions of their own important characteristics to their preferences of characteristics for co-leaders: 1) two Servant Leaders preferred Servant Co-leaders, 2) five Situational Leaders preferred Situational Co-leaders, 3) two Transformational Leaders preferred Transformational Co-leaders, 4) two Situational Leaders preferred Servant Co-leaders, 5) one Transformational Leader preferred a Servant Co-leader, 6) one Situational Leader preferred a co-leader who was a combination of all three styles, 7) one leader who was a combination of all three styles preferred a Servant Co-leader, 8) two leaders who had a style different from the other leaders of this study preferred a Servant Co-leader, and 9) one Situational Leader preferred a co-leader with a style different from the other co-leaders of this study.

There were six noteworthy relationships of demographic attributes to beliefs of outdoor leaders: 1) from a total of three Transformational Leaders, two were older than all the other leaders in this study, 2) the two subjects with the highest level of education were Transformational Leaders, 3) from a total of eight leaders who wanted co-leaders with different characteristics, six were female, 4) from a total of eight leaders who wanted a Servant Co-leader, six were female, 5) from a total of nine leaders who wanted co-leaders with similar characteristics, seven were male, and 6) from a total of five Situational Leaders who preferred Situational Co-leaders, four were male.

This chapter proceeds with a discussion of The Servant, Situational, and Transformational Leaders' beliefs, the trends in leader: co-leader preferences, and the trends in demographic relationships among leader: co-leader preferences. This discussion is supported by related leadership and co-leadership research. The chapter then presents the implications the research findings have to theory and practice. The chapter concludes with recommendations to future research.

The Servant Leaders

The Servant Leaders believed that open communication, honesty and integrity, trust, and community and cooperative spirit between co-leaders, and leaders and participants, were of primary importance on a wilderness trip. Servant Leaders placed importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally. They believed the skills and traits promoting these relationships were essential for realizing the goal of a positive wilderness experience.

This belief supported researchers in the disciplines of education and group therapy (Hohenbrink et al., 1997; Nosko & Wallace, 1997; Stempler, 1993). Previous researchers have concluded that openness, honesty, trust, and good communication are essential for building the relationships that allow people to work together and accomplish innovative and extremely challenging goals. These skills and traits promote very effective group leadership and co-leader relationships (Hohenbrink et al., 1997; Nosko & Wallace, 1997; Stempler, 1993; Winitzky et al., 1995).

It appears that Servant Leaders believed certain traits taken to extremes by leaders could have the potential for a negative impact on relationships and/or on personal development. This interpretation was supported by one Servant Leader's viewpoint regarding courage and charisma, "…excessive courage and charisma could block out the skills of others…" (11M). This may explain why

these two traits were placed in the "most unlike" category of the Servant Leaders' composite array, in the -4 and -2 array positions, indicating the relative unimportance of these traits to these wilderness trip leaders.

Relationship skills were seen as essential because they were perceived as more difficult to learn than technical skills and could not easily be learned during the time the group was in the field. Because interpersonal skills were difficult and time consuming to learn, the lack of these skills in the field could result in negative consequences. This viewpoint was supported by two comments taken from the personal interviews of the Servant Leaders: "...the things on the positive side (of the matrix) took way more effort and are harder to learn. You are constantly learning these..." (12F). "...technical things can be taught in the field, but if I can't get along with someone for a month I'm in big trouble..." (11M).

Relationship building skills were seen as being more difficult to learn than technical skills. As a result, Servant Leaders believed these skills could not easily be learned during the time the group was in the field. This view supported that of Priest (1987), whose research concluded that personality traits that were important to outdoor leaders for good human relations skills could not be taught to outdoor leaders during a training course. Potential leaders needed to have these skills prior to taking the course and be continually developing them over time.

The remoteness of the wilderness location made honest, open, and trusting relationships seem extremely important to the Servant Leader. This was

evident in the following comment, "I couldn't imagine having to lead with someone I couldn't get along with in such a remote place" (12F). This belief could explain why the statement concerning knowledge of, and familiarity with, the trip environment, was in the -3 array position. It appeared that the skills and traits that maintained personal relationships were viewed as more important to Servant Leaders than the environment in which the trip was occurring. Furthermore, the integral value of relationships was viewed as the means to accomplish the technical needs. One participant explained: "good interpersonal skills can eliminate the need for courage and result in the technical stuff working" (11M).

The integral value of relationships was also viewed as the means to accomplish a positive trip experience. This belief was expressed by the woman who referred to herself as a Native leader: "...technical skills are important, however, relationship skills, such as patience, humor, and trust, will make people feel more comfortable with me, and things will then go better because students will develop more trust and confidence in me and take more risks, which will ultimately result in a more positive experience..." (12F). Positive relationships were of primary importance to the Servant Leaders. It seemed they believed that if relationships were nurtured, then everything else would fall into place.

Trusting, open, interpersonal relationships were of utmost importance to the Servant Leaders of this study. They were important in spite of the remoteness of the wilderness location and they were seen as the means to accomplish the technical needs of the group and a positive trip experience. Greenleaf (1977) described the practice of servant leadership as having no

boundaries of location. He saw servant leaders championing people in businesses, corporations, churches, universities, and in the home. In keeping with this philosophy, servant leaders would champion people in wilderness locations, as well. That appeared to be the case in this study. Greenleaf (1977) talked about the "servant" (the desire to serve people) being deep inside the servant leader, and something that cannot be taken away. Although wilderness trip leaders require a well-rounded knowledge base to deal with the technical and environmental aspects of the trip, the "servant" aspect of the leaders of this study kept their primary focus on the importance of people and their personal growth.

The Factor 1 Servant Leaders exhibited components described in the literature that characterize servant leaders. The following table (Table 8) presents a comparison of similarities and differences between the servant leadership literature and the Servant Leaders of this study.

Table 8

Characterization of Servant Leadership Similarities and Differences Between the

Literature and Research

Literature	This Research
A servant of people, one who has a natural desire to serve first (Greenleaf, 1977)	Servant Leaders of Factor 1 included a ministry student and a citizen of the First Nations; both belong to a vocation or a culture dedicated to the spiritual well-being of their people.
Healing, including broken spirits and emotional hurts (Spears, 1995)	Research subjects led "youth at risk" in an attempt to heal emotional hurts and broken spirits
Stewardship, assumes holding something in trust for another, it emphasizes the use of openness (Spears, 1995)	Similar to the literature, research subjects believe in stewardship, as indicated by their placement of statements 14 (being 'real' with each other, exhibiting honesty and integrity, being unpretentious), 15 (ability and willingness to communicate openly), and 33 (must be 100% trustworthy and dependable) in the +4 array position. This belief was confirmed by the comment: "The main point is to have a

	good, trusting, open relationship with my co-leader" (11M).
Aware of the need to build community (Spears, 1995)	Similar to the literature, research subjects believed in community, as indicated by their placement of statement 16 (promote a sense of community and cooperative spirit, think in terms of "we" not "I") in the +2 array position.
Strive to understand and empathize with others (Spears, 1995)	This belief is confirmed by the comment: "I want them to be open with me. I want to know what is going on with them" (12F).
Foresight, an ability to understand lessons from the past, the realities of the present, and the likely consequences of a decision for the future (Spears, 1995)	One research subject demonstrated her understanding of the consequences of having relationship skills by the following comment: "…relationship skills such as humor, trust, and patience, will make people feel more comfortable with me, and things will then go better because youth will develop more trust and confidence in me and take more risks,

	which will ultimately result in a more positive experience..." (12F)
Leaders rely on persuasion rather than positional authority (Spears, 1995)	Research subjects believed in the use of a leadership style other than positional authority, as indicated by their placement of statement 32 (ability to be flexible with leadership style) in the +3 array position.
Valued for their communication and decision-making skills (Spears, 1995)	Research subjects believed in the value of communication and decision-making skills as indicated by their placement of statements 15 (ability and willingness to communicate openly) and 21 (a good decision maker) in the +4 and +3 array positions.

The Situational Leaders

The research participants comprising the Situational Leaders factor believed that technical skills to match the trip environment, comfort in the outdoor environment, safety, and the ability to handle crisis situations were of primary importance for leaders and co-leaders to possess on a wilderness trip.

Situational Leaders appeared to have a strong belief in the importance of the technical, environmental, and safety aspects of leader skills.

In contrast with Servant Leaders, building and maintaining personal relationships, and personal and group development did not appear to be important to Situational Leaders. The only interpersonal skill appearing on the extreme "most like" array position was the ability to handle personal conflict. Some leaders consider resolving personal conflict to be a technical skill because there are formulas, or "recipes", for learning how to deal with personal conflict. This could be the case with this study's Situational Leaders.

Situational Leaders also placed self-awareness in the "most unlike" array position. One Situational Leader described self-awareness in this manner: "I look at this as planning things out instead of being open and reacting to the situation." Self-awareness seemed to have a negative aspect, and therefore a quality not very important for a trip leader to possess. This belief did not support Wagstaff (1997), who concluded that self-awareness was an attribute important to improving the quality of leadership. This could be explained by the fact that Wagstaff's research subjects were challenge course instructors who deliberately created controversy and conflict within their groups. Therefore, it was very important for his research subjects to possess self-awareness. The Situational Leaders of this study did not deliberately create group conflicts. Their goal was to move group participants safely throughout the trip.

Also in contrast to Servant Leaders, Situational Leaders believed the remote location necessitated a high value being placed on safety and on

technical skills. In some instances, the leader had to compromise her/his personal values and ideals due to the remote location. This belief was supported by the interview comments of one Situational Leader who led for a commercial outfitter in the Yukon: "Ideally, group dynamics and growth would be very important, however, these types of traits must take less of a priority in a more isolated, skill demanding location." (15M).

In addition, Situational Leaders appeared to keep the group in an immature stage. One leader stated, "The leader needs to physically take care of people. Leader confidence in these areas (said pointing to positive array statements) are passed onto students who then feel they are safe with this leader. They trust that they will be taken care of, even if they think the leader is a jerk" (09M).

From the total of 14 Q-sorts that loaded on the Situational Leader's factor, nine were "leader (L)" Q-sorts and five were "co-leader (CL)" Q-sorts. Two of the Situational Leaders led trips for private and commercial outfitters, four led youth groups for educational purposes, two worked for Project DARE leading young offenders, and one led groups for Outward Bound. Situational Leaders led a variety of groups with a variety of trip goals, yet they all placed primary importance on skills and traits promoting safety and survival for the group in the wilderness.

Hersey and Blanchard's (1974) model of situational leadership may explain why the leaders, leading a variety of groups with a variety of goals, all placed primary importance on technical, environmental, and safety skills and

traits. First, the leaders were in a situation where the group was of low maturity. The group could be immature because it was newly formed, its members had low interpersonal skills, its members were not interested in personal growth, the tripping company did not mandate personal growth of clients, or the group members were in an unknown wilderness environment. The leader would then adopt a highly directive leadership style. If the group was not able, or willing, to become mature and accomplish its goals on its own, the leader would use the directive, or "telling" style during the trip. This would result in Situational Leaders placing importance on technical and safety leadership skills in the wilderness.

A second explanation may be that, as a result of being in the wilderness, the leaders value only the task skills and traits, and therefore attempt to keep the group in an immature stage. The Situational Leaders believed in the importance of technical and environmental skills over the human relationship aspect when leading wilderness trips. In some cases, it appeared that leaders were only interested in their group members in relation to teaching technical skills and keeping them safe. Their primary focus was on the task. What would happen on an extended wilderness trip if the leader attempted to keep the group in an immature stage for the duration of the trip?

The Factor 2 Situational Leaders exhibited components described in the literature that characterize situational leaders. The following table (Table 9) presents a comparison of similarities and differences between the situational leadership literature and the Situational Leaders of this study.

Table 9

Characterization of Situational Leadership Similarities and Differences Between the Literature and Research

Literature	This Research
The situation determines the behavior of the leader (Hersey & Blanchard, 1974).	This belief is confirmed by one research subject's comment: "…in an isolated northern river situation, the technical skills take on a greater value than in a less isolated lake-tripping environment…" (15M)
With a group of low maturity the leader will adopt a highly directive style (Hersey & Blanchard, 1974).	The leaders of Factor 2 appear to believe in the use of a directive style. This belief is confirmed by one research subject's comment: "The leader needs to physically take care of people. Leader confidence in these areas are passed on to students who then feel they are safe with this leader. They trust that they will be taken care of, even if they think the leader is a jerk" (09M)

When the leader needs the group to buy into a certain activity or belief she/he will use a "selling style" (Hersey & Blanchard, 1974).	There is not enough data to support this element of situational leadership.
As the group matures the leader will become more supportive, using a "participating" style (Hersey & Blanchard, 1974).	The primary leader looked to his/her co-leader to provide this. One leader explained, "The co-leader doesn't have to be as serious as the leader, therefore can let loose more" (01M)
When the group is able to accomplish its goals on its own the leader can step back and use a laissez-faire style (Hersey & Blanchard, 1974).	The primary leader looked to his/her co-leader to provide this. One leader explained, "A leader has gone through a lot of stuff and therefore is in the leadership role and the co-leader (who is learning) needs to be more flexible" (09M)

The Transformational Leaders

The Transformational Leaders of this study believed in community and cooperative spirit, knowledge of the trip environment, good decision making, and in helping to better others. The Transformational Leaders appeared to place

primary importance on developing the individual and the community, and in being proficient in all areas of the trip skills. These attributes have been described as the backbone of the success of transformational leadership (Bass, 1985, 1990, 1997; Bass & Avolio, 1994).

Transformational Leaders appeared to view the integral value of community as the means to accomplish the trip successfully. Two leaders would not lead a trip without like-minded people. As one research subject explained, "Community is very important to me! Community and cooperative spirit is very important. Once you have this, things will go well" (08M).

It appeared that, rather than aiding trip leaders, the possession of certain traits were believed to have the potential to negatively impact the trip community. Courage, was defined by one Transformational Leader in this manner: "Courage implies that you're doing something you don't have the skills for. You're not relying on your knowledge or using good judgment" (08M). It appeared that courage was needed when taking a risk, a risk that could potentially harm the group or put the group in danger.

With a cautious outlook, Gardner and Cleavenger (1998) described charisma in terms of putting on an act to foster a desired image. In some cases this image was fostered to deliberately mislead followers. These researchers believed that being charismatic did not mean that leaders used good judgment or decision-making skills. They believed that leaders' charm and persuasion could cause followers to fall under a spell and overlook warning signs and/or actual performance deficiencies, and follow blindly, with sometimes devastating results.

The Transformational Leaders in this study seemed to share this view of charisma. If this were so, it could be that the very pretext of putting on an act was in opposition to what was important, which was being real with each other and exhibiting honesty, integrity, and unpretentiousness. One may wonder if a leader can exhibit honesty, integrity, and unpretentiousness while having charisma. It appeared this was not believed to be the case by the Transformational Leaders of this study. Charisma was associated with insincerity and with putting on an act in order to gain the affection of group members. Regarding charisma, one Transformational Leader was adamant: "the only one I don't want to work with is CHARISMA" (17F). She further explained: "I associate it with insincerity. They are trying to be liked the most so they work at getting the groups affection." Being on an extended wilderness trip with a co-leader who constantly vied for the attention and affection of the group proved to be most difficult and discouraging for the Transformational Leaders of this study, regardless of the group and the wilderness location.

In this study, the Transformational Leaders viewed co-leadership as a team effort. One could imagine what would happen when one member of the leadership team had charisma and the other did not. Bennis and Heenan (1999) pointed out that in North American society, which is obsessed with celebrity, the co-leader with charisma is seen as number one, while the co-leader with no charisma remains in relative anonymity. The charismatic leader overshadows the non-charismatic leader, usurping her/his power and respect from the group members. In addition, if the charismatic leader leaves the group, the non-

charismatic leader has to go through a period of proving herself as a leader. This very aspect of charisma was a concern for the Transformational Leader who did not want to work with a leader who had charisma. This trip leader claimed she did not possess charisma. When she had to co-lead with someone who was charismatic she was overshadowed by this leader. In turn, a power struggle resulted in order for her to be accepted by the group as one of the leaders.

These beliefs did not support Bass (1985), who included charismatic leadership as one of the four major components of transformational leadership. Charisma was considered to be an extremely important trait for leadership. A leader with charisma would display power, confidence, commitment, ethics, and risk taking. By this definition, courage needed for risk taking could be a part of a leader's charisma. Charisma enabled leaders to have referent power and influence over their followers, which in turn enabled them to achieve results thought to be impossible to reach. Currently, "idealized influence" and "charismatic leadership" are used interchangeably in some transformational leadership literature (Avolio et al., 1999; Dubinsky et al., 1995).

The Factor 3 Transformational Leaders exhibited components described in the literature that characterize transformational leaders. The following table (Table 10) presents a comparison of similarities and differences between the transformational leadership literature and the Transformational Leaders of this study.

Charisma (Bass, 1985)	Interpreted in a negative fashion, charisma was placed in the -2 array position. With a strong reaction to this trait, one research subject objected: "...the only one I don't want to work with is CHARISMA" (17F).
Employ inspirational motivation by describing positive visions of the future, challenging followers with high standards, and encouraging them to achieve these high standards (Bass, 1985)	Research subjects believed in inspirational motivation, as indicated by their placements of statements 21 (a good decision maker), 24 (high level of comfort in the outdoors), 25 (knowledge of, and familiarity with the trip environment), and 34 (top physical condition) in the + array positions. This belief was confirmed by the comment: "We push each other to the max, but not past the emotional threshold" (10M).
Provide intellectual stimulation by constantly questioning traditions and existing beliefs and assumptions (Bass, 1985)	Research subjects believed in community and cooperative leadership, as indicated by statement 16 (promote a sense of community and cooperative

	spirit, think in terms of "we" not "I") being placed in the +4 array position. This belief was confirmed by the following comment: "Community and cooperative spirit is very important. Once you have this, things will go well" (08M). Cooperative leadership is a different way of viewing leadership which contrasts with the traditional belief in hierarchical leadership.
Display individualized consideration by treating others as special and unique individuals (Bass, 1985)	Research subjects believed in individualized consideration, as indicated by statement 17 (enable others to realize a higher level of potential) being a distinguishing statement of Factor 3. This belief was confirmed by the following comment: "It's important that everyone have a say in what they want to do… if someone's not comfortable doing something they voice this, and it is respected by the group members" (08M).

Trends in Leader: Co-leader Preferences

From the nine leader: co-leader preferences revealed by data analysis, trends were revealed. Although these trends cannot be generalized to the outdoor trip leader population, they offer interesting and thought-provoking insights into outdoor leader preferences for co-leaders. Six leader: co-leader preference trends are listed below, followed by a discussion of each.

1. The Servant Co-leader was the most frequently preferred co-leader.

2. Situational Leaders were the only leaders who preferred Situational Co-leaders.

3. Transformational Leaders were the only leaders who preferred Transformational Co-leaders.

4. The Situational Leaders indicated they would co-lead with Servant Leaders.

5. The Transformational Leaders indicated they would co-lead with Servant Leaders.

trend 1. In this study, the Servant Leader was the most preferred co-leader. Eight out of the 17 leaders preferred a Servant Co-leader, while five leaders preferred Situational Co-leaders, two leaders preferred Transformational Co-leaders, and two preferred a leader type not revealed by this study (see Table 6). Servant Leaders viewed co-leadership as a team effort, with a sharing of leadership roles. They believed they could lead as a team despite differences in age and level of work experience. The Servant Leaders of this study, a ministry student and a citizen of the First Nations, who both had a focus on service to others, led trips to serve youth. In their interviews they talked about having

confidence in their co-leaders. They talked about the value of trusting and open relationships, having good communication, overcoming problems, and gaining solutions. These values would enable them to lead as part of a team in order to help group members achieve a positive experience.

In addition to possessing selfless and giving personalities, Servant Leaders used many positive interpersonal skills that helped build and maintain positive personal relationships. It stands to reason that a selfless, giving leader, who uses excellent interpersonal skills would be sought after by other leaders. On a wilderness trip where leaders are together 24 hours a day for 10 or more days, working with a giving, selfless co-leader would make the lengthy leadership experience a very exciting prospect!

This study offers several parallels to existing co-leadership research. Co-leadership research has occurred in the disciplines of education and social work (Borthwick et al., 2000; Hohenbrink et al., 1997; Nosko & Wallace, 1997; Stempler, 1993; Winitzky et al., 1995). The co-leadership research subjects in these studies were dedicated to serving people, with the ultimate goals being student success and positive behavior changes. Researchers believed these goals could not be accomplished without effective interpersonal and cognitive skills and traits. Therefore, they focused their research on developing models and including these skills, which would promote effective co-leadership (Borthwick et al., 2000; Hohenbrink et al., 1997; Nosko & Wallace, 1997; Stempler, 1993; Winitzky et al., 1995).

trend 2. The Situational Leaders of this study were the only leaders who preferred Situational Co-leaders. The Situational Leaders appeared to view co-leadership as a hierarchy, which consisted of a primary leader and a secondary leader, the secondary leader being the co-leader. The primary leader was the leader with the most tripping experience, and was responsible for the physical safety of the group, and the task of moving the group from point A to point B. The secondary leader, or co-leader, had less experience, and was still in the "learning" phase. She/he was the supportive leader who had the "more difficult" role of performing the remaining leadership roles: these roles included the remaining task roles and the majority of the group maintenance roles. Then, if the primary leader was incapacitated, the co-leader would step into the primary leadership position and assume the roles associated with this position. The primary leaders of the hierarchy placed emphasis on technical and environmental skills, and preferred a co-leader who ultimately would do the same. In this study, it appeared that some of the Situational Leaders believed in this traditional form of leadership, and preferred a co-leader who also bought into this style.

This view was supported by Tuckman and Finkelstein (1999), who concluded that there could be no truly equal co-leadership teams, regardless of age, professional status, or levels of work experience because, for the most part, people who were accustomed to working in a traditional model had trouble adapting to a co-leadership model where a whole new set of rules had to be learned. The result of two leaders working together as co-leaders was a continuous power struggle.

Except in emergency/crisis situations, there may be disadvantages to a hierarchical view of co-leadership. A hierarchy could result in an inflexible form of leadership that does not easily allow for change. In a hierarchy, problems may not be addressed in an appropriate and timely manner, and movement of information from group members to co-leader to primary leader may be slow to occur, or may not occur at all. The research of Veal and Rikard (1998) provided support for this occurrence. The hierarchy in student teaching had been in place since student training was developed. By a combination of events, the norms of this hierarchy resulted in a leadership-training program that was no longer optimal. In this hierarchy the primary leader held the power. This had created a largely resentful and adversarial environment amongst its members, which resulted in little or no sharing of information. The rest of the group did not make the head leader aware of their day-to-day events. The training system had reached a stage where there were many problems that needed to be addressed and changed. What would happen during an extended wilderness trip if problems weren't solved as they occurred, but were left to build? What would happen if an important piece of information was not shared with the primary leader because of resentment?

Secondly, the human dynamics of all involved could be neglected, and their safety compromised, if a Situational Leader did not seek a co-leader who complemented her/him. Veal and Rikard (1998) described the consequences that resulted when the human dynamics within the hierarchy were neglected. Members of the student training hierarchy were tense and unhappy, and

questioned why they were still involved in the activity. This loss of interest and subsequent abdication of leaders and group members could also occur on a wilderness trip if human dynamics were ignored.

trend 3. The Transformational Leaders of this study were the only leaders who preferred Transformational Co-leaders. The Transformational Leaders viewed co-leadership as a team, a sharing of roles using a democratic approach. Co-leaders were part of the group community. Transformational Leaders talked about everyone voicing opinions, considering all points of view, and discussing outcomes in a respectful atmosphere. This belief in building community was supported in Transformational Leadership literature where transformational leaders were found to transcend self interests for the good of the group community (Bass, 1985). The Transformational Leaders of this study reported they led personal trips that were physically, mentally, and emotionally challenging. They led only with co-leaders they knew well.

This profile supported the transformational leadership research literature. Bass (1990) described Transformational Leaders as the "movers and shakers of the world." (p. 23) In organizational research, these movers and shakers, generally at the top levels of organizations, were shown to have cascaded from one level to the next until the transformational leadership philosophy permeated the entire organization. Researchers suggested that in order to accomplish this feat, transformational leaders either selected other transformational leaders or they developed them (Bass, Waldman, Avolio & Bebb, 1987). Similarly, the Transformational Leaders of this study appeared to believe so strongly in their

values that they selected co-leaders with the same values to lead such physically, mentally, and emotionally challenging trips.

trend 4. Situational Leaders in this study indicated they would co-lead with Servant Leaders. The Situational Leaders of this study were task oriented leaders. They placed primary importance on the technical, environmental, and safety skills of leadership in a wilderness situation. On the other hand, the Servant Leaders of this study were people oriented leaders. They placed primary importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally. According to Blake and Mouton's two dimensional view of leadership based on "concern for people' and "concern for task", the ideal leadership style is one that shows a high concern for both people and task (Blake & Mouton, 1982). By leading together in a co-leader team, the Servant Leaders' concern for people would provide a perfect balance to the Situational Leaders' concern for task. One would complement the other's skills and traits.

trend 5. The Transformational Leaders of this study indicated they would co-lead with Servant Leaders. The Transformational Leaders of this study placed primary importance on developing the individual and the community, and generating awareness of the mission of the group. The Servant Leaders of this study were also people oriented leaders. They placed primary importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally. Transformational leader and servant leader characteristics are closely related. In the literature some of the theoretical

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components are indistinguishable (Bass, 1980; Greenleaf, 1977: Spears, 1995). Transformational and Servant Leaders had many of the same beliefs concerning the importance of people on a wilderness trip. Both types of leaders believed in the ability and willingness to have honesty and integrity, to communicate openly, to build a synchronous relationship, to promote a sense of community and cooperative spirit, and to be a good decision maker. They also shared a common reservation for charisma and courage. Transformational and Servant Leaders would create a co-leader team based on similar values.

In the research literature, transformational leadership was not viewed as a separate style of leadership, it was described as an expansion of another leadership style (Bass & Avolio, 1994). In this study, Transformational and Servant Leaders had many of the same beliefs concerning the importance of people on wilderness trips. However, Transformational Leaders' beliefs expanded on the beliefs of Servant Leaders. In addition to the interpersonal skills that were important to both types of leaders, Transformational Leaders believed in the importance of technical and environmental skills. If Transformational Leaders' beliefs expanded on the beliefs of Servant Leaders, then when the two types of leaders co-led together, the "task" focus could be as thorough as the "people" focus. One can envision the possibility of these two types of leaders forming a very harmonious leadership team, one that could create a very empowering and uplifting wilderness experience.

Trends in Demographic Relationships Among Leader: Co-leader Preferences

As mentioned earlier, there were several noteworthy relationships of demographic attributes to beliefs of the outdoor leaders in this study. Six relationships are listed below, followed by a discussion of each.

1. From a total of three Transformational Leaders, two were older than all the other leaders in this study.

2. The two subjects with the highest level of education were Transformational Leaders.

3. From a total of eight leaders who preferred co-leaders with different characteristics, six were female.

4. From a total of eight leaders who preferred a Servant Co-leader, six were female.

5. From a total of nine leaders who preferred co-leaders with similar characteristics, seven were male.

6. From a total of five Situational Leaders who preferred Situational Co-leaders, four were male.

trends 1 and 2. From a total of three Transformational Leaders, two were older than all the other leaders in this study. The two research subjects with the highest level of education were Transformational Leaders.

As age and level of education increases, some people become more creative individuals, and gain the ability to transcend cultures and practice universal values (Gilligan, 1982; Kohlberg, 1981). These are characteristics that have been described in the theory of transformational leadership (Bass, 1980).

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These findings partially support Wagstaff (1997), who concluded that as the age of his research subjects increased, their inner-directedness, which is an aspect of transformational leadership, also increased. The three wilderness trip leaders of this study with the greatest number of years to their lives and the highest level of education possessed transformational leadership qualities. The skills and traits these leaders bring to wilderness trip leadership attests to the importance of older and wiser trip leaders; they have much to offer a co-leader and a group on a wilderness trip.

trends 3 and 4. From a total of eight leaders who preferred co-leaders with different characteristics, six were female. From a total of eight leaders who preferred a Servant Co-leader, six were female.

These preferences implied that female trip leaders were flexible, allowed for change, and were open to different leadership styles. These preferences also implied that female trip leaders, whether they were Servant, Situational, or Transformational Leaders, valued co-leaders with strong interpersonal and relationship building skills; co-leaders who were team oriented and shared leadership roles. Female trip leaders valued skills and traits such as openness, trust, honesty, integrity, and community and cooperative spirit.

These findings were supported by researchers who investigated women in relation to outdoor leadership (Henderson, 1996; Jordan, 1992). Henderson (1996) described female values as being associated with a priority on form and harmony; concern for people, unity, and spirituality; a desire to help and care for others; and a concern for beauty and creative expression. Many of these values

were attributed to the early socialization of girls by society (Jordan, 1992). Females were socialized to focus on others, and as a result were very skilled in recognizing and providing for the needs of others (Jordan, 1992). In her investigation of women in outdoor leadership roles, Henderson (1996) proposed the concept of feminist transformational leadership. This was an empowering model designed to enhance the experiences of all people in the outdoors. In this model, power was shared, differences in leadership style were valued, and individuals given a high level of control over their environment. Henderson (1996) believed that these characteristics were needed by women, and men, in order to provide the highest quality of outdoor leadership for the future.

In this study, the above perceptions and attitudes were made apparent by women's preferences for co-leaders with Servant Leader characteristics and leadership styles different from themselves. It appears that the women wilderness trip leaders valued flexibility, openness, trust, integrity, and community in a co-leadership team. The women of this study can offer interpersonal support and opportunities for personal growth to others. They can be mentors to others, and model these skills and traits in a wilderness setting. In this manner, they have the opportunity to provide a high quality of outdoor leadership.

   trends 5 and 6. From a total of nine leaders who preferred co-leaders with similar characteristics, seven were male. From a total of five Situational Leaders who preferred Situational Co-leaders, four were male.

These preferences implied that male trip leaders were not very open to leadership styles different from their own. These preferences also implied that four male trip leaders valued a traditional hierarchical, directive leadership approach, and sought a co-leader who exhibited the same values.

These findings were supported by researchers who investigated men in relation to outdoor leadership (Jordan, 1992; Loden, 1985). Loden (1985) described male values as being associated with the desire for practicality and the utility of things and ideas; a search for truth, power, and influence; objective power and reasoning; and gaining the influence and admiration of others. As in the case with girls, many of these values were attributed to the early socialization of boys by society (Jordan, 1992). Many young men, who feel more comfortable in a hierarchical system, may seek out a leader who exhibits the same orientation (Jordan, 1992). It appeared that this did not hold true for the Situational Leaders of this study alone, this held true for the two other leader types as well. The male leaders of this study sought out leaders who exhibited leader preferences similar to their own. In this manner, the values of the individual leaders were reinforced and perpetuated.

In this study, the above perceptions and attitudes were made apparent by men's preferences for co-leaders with characteristics and leadership styles similar to themselves. This creates potential conflict as soon as women become involved as co-leaders. The women in this study exhibited leader: co-leader values different from the men. They valued respect for differences, and flexibility of leadership styles, as opposed to only those characteristics and leadership

styles similar to themselves. As reported by Henderson (1996) and Jordan (1992), because female outdoor trip leaders have values different from male outdoor trip leaders, they may feel alienated, powerless, and/or devalued by traditional male leadership, and may not want to participate as a result. Following Henderson's (1996) transformational leadership model could empower both sexes of leaders to develop their own outdoor expertise and respect for differences of leadership style. In order aid male trip leaders in gaining more flexibility and acceptance of differences, outdoor leaders need to make a conscious effort to have a co-ed team of leaders and be aware of the differences in values that exist between the two.

Implications of the Research Findings

Implications to Theory

The analysis of the Q-sorts revealed three distinct patterns of belief. From this research one may theorize that there are three different types of wilderness leaders: Servant Leaders, Situational Leaders, and Transformational Leaders.

Servant Leaders are characterized by their strong belief in open communication, honesty and integrity, trust, flexibility of leadership style, and community and cooperative spirit. Servant Leaders place importance on building and maintaining trusting relationships, and taking care of people, both physically and emotionally, during an extended wilderness trip. People, and relationships are important in spite of the remoteness of the wilderness location. Positive

interpersonal relationships are seen as the means to accomplish both the technical needs of the trip, and a positive trip experience. Servant Leaders believe co-leadership is team leadership, where leadership roles are shared. Trusting, open relationships are seen to build confidence between leaders, and to aid in leadership effectiveness.

Situational Leaders are characterized by their strong belief in technical skills to match the trip environment, comfort in the outdoor environment, safety, and the ability to handle crisis situations. Situational Leaders appear to place primary importance on the technical, environmental, and safety aspects of leadership during an extended wilderness trip. In opposition to Servant Leaders, Situational Leaders focus on the task aspect of leadership. They prefer to use a directive style of leadership, with the group remaining in an immature stage of development for the duration of the trip.

Situational Leaders believe co-leadership is a hierarchy, with the more experienced leader being the primary leader, and the less experienced leader being the secondary, or co-leader. The primary leader is responsible for safely moving the group throughout the duration of the trip. The co-leader is responsible for the majority of the group maintenance roles. If the primary leader is injured, the co-leader will step into the primary leadership position and assume the roles associated with that position.

Transformational Leaders are characterized by their strong belief in community and cooperative spirit, knowledge of the trip environment, good decision making, and in helping to better others. The Transformational Leaders

appear to place primary importance on developing the individual and the community, and in being proficient in all skill areas during an extended wilderness trip. They do not believe in the need for courage or charisma as a leadership trait because of the conflicts and potential hazards they create.

Transformational Leaders believe co-leadership is democratic, team leadership. Co-leaders are part of a group community where everyone voices their opinion, all points of view are considered, and outcomes are discussed in a respectful atmosphere.

This is the first study to show that three distinct leadership types, based on three leadership theories, are present in outdoor recreation in a wilderness setting. This study investigated the skills and traits as three collectives that combined to create specific leadership types rather than as separate entities to be ranked. In this manner, the skills and traits of each collective could provide detailed information of outdoor leaders' preferences for co-leaders, and for leaders working together as co-leaders.

Implications to Practice

The results of this study have implications to practice for organizations and for the individual trip leader. Information gathered for this study revealed that virtually no time was spent by leaders negotiating roles with their co-leaders before they stepped into their position as group leader. Most organizations do not place emphasis on this aspect of wilderness leadership. Being aware that there are three leadership types, and leader: co-leader trends that can have an impact

on co-leader dynamics and goal interrelationships, can alert programmers to the fact that there is new information that needs to be shared between leaders. Programmers should give co-leaders time, before the group arrives, to establish their working relationship. For example, a 10 day trip with a group would mean a 12 day work period for the trip leaders. At least 24 hours of focused sharing of information and actual observation of each other's skills and traits in the form of an overnight campout would allow co-leaders to discover one another's leadership type, strengths, and weaknesses. This would result in a better understanding of each others behaviors, and aid in negotiating roles, and in gaining realistic expectations of each other during the trip to follow.

Current practices in leadership training programs involve little co-leading observation or practice. Using the information gained from this study, a more focused co-leadership practice, as described above, can be included in the training programs.

The findings of this study can be used to help raise the awareness level of individual trip leaders during their leadership training. The findings can be used to raise leaders' personal awareness. For example, why does the individual lead trips? What are her/his reasons for leading? Despite who she/he is leading the trip for, and the trip goals, is the individual more interested in the people or in the technical aspects of the trip? Or could it be that the environment is the passion of the individual? Possibly, she/he is interested in all things equally. Knowing where the passion lies, and each leader's personal leadership philosophy, can help

wilderness trip leaders better understand the skills and traits that are most important to them.

The findings of this study may also be used to help raise the awareness level of leaders as co-leaders. Co-leaders should have a focused discussion concerning each other's leadership type, strengths, weaknesses, and reasons for leading. This can help both leaders better understand each other's behaviors, and aid in negotiating roles, and in gaining realistic expectations of each other during the trip. The questions used to learn more about each other can be taken from the areas of the three leadership theories and the 12 remaining co-leader trends discussed in this study.

Recommendations for Future Research

1. Repeat the study using a larger trip leader sample, and/or a sample from a wider geographic location, in order to discover additional leadership types.
2. Develop a Q-sample from personal interviews as opposed to one developed strictly from the literature.
3. Follow up the study with personal interviews to aid in the interpretation of the factors.
4. Investigate the outdoor leader: co-leader trends in greater detail.
5. Investigate the impact of co-leadership on trip participant satisfaction.
6. Investigate what makes co-leader relationships stable.

REFERENCES

Alfred, A. R. (1992). Members' perceptions of co-leaders' influence and effectiveness in group psychotherapy. *The Journal for Specialists in Group Work, 17(1)*, 42-53.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1996). *Replicated confirmatory factor analyses of the Multifactor Leadership Questionnaire (Form 5X; Rev.; CLS Tech. Rep. No. 96-1)*. Binghamton: State University of New York at Binghamton, Center for Leadership Studies.

Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. *Journal of Occupational and Organizational Psychology. 72(4)*, 441-462.

Bass, B. (1985). *Leadership and performance beyond expectation*. New York: The Free Press.

Bass, B. (1990). *Bass and Stogdill's handbook of leadership*. New York: The Free Press.

Bass, B. M. (1996). A new paradigm of leadership: An inquiry into transformational leadership. *U.S. Army Research Institute for the Behavioral and Social Sciences*. Washington, DC.

Bass, B. M. (1997). Does the transactional-transformational leadership paradigm

transcend organizational and national boundaries? *American Psychologist. 52(2)*, 130-139.

Bass, B. M., & Avolio, B. J. (1993). Transformational leadership: A response to critiques. In M. M. Chemers & R. Ayman (Eds.), *Leadership Theory and Research: Perspectives and Directions* (pp. 49-80). New York: Academic Press.

Bass, B. M., & Avolio, B. J. (1994). *Improving organizational effectiveness through transformational leadership*. Thousand Oaks, CA: Sage.

Bass, B. M., Avolio, B. J., & Atwater, L. (1996). The transformational and transactional leadership of men and women. *Applied Psychology: An International Review. 45(1)*, 5-34.

Bass, B. M., Waldman, D. A., Avolio, B. J., & Bebb, M. (1987). Transformational leaders, the falling dominoes effect. *Group and Organization Studies. 12(1)*, 73-87.

Blake, R. R. & Mouton, J. S. (1982). Theory and research for developing a science of leadership. *Journal of Applied Behavioral Science. 18(3)*, 275-291.

Blank, W., Weitzel, J. R. & Green, S. G. (1990). A test of the situational leadership theory. *Personnel Psychology. 43(3)*, 579-597.

Borthwick, A. G. (1995). School-university-community collaboration: Establishing

and maintaining partnerships for school improvement. Paper presented at the *Annual Meeting of the American Educational Research Association*. San Francisco,CA.

Borthwick, A. C., Stirling, T., & Cook, D. (2000). Achieving successful school-university collaboration. Paper presented at the *Annual Meeting of the American Educational Research Association*. New Orleans, LA.

Borthwick, A. C., Stirling, T., Nauman, A. D., Bishop, G., & Mayer, N. J. (2001). Understanding successful school-university collaboration: Drawing conclusions through focus groups. Paper presented at the *Annual Meeting of the American Educational Research Association*. Seattle, WA.

Brown, S. R. (1993). A primer on Q methodology. *Operant subjectivity. 16(3/4)*, 91-138.

Brown, S. R. (1986). Q technique and method. In W. D. Berry & M. S. Lewis-Beck (Eds.), *New Tools for Social Scientists*. Beverly Hills, CA: Sage.

Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. New Haven and London: Yale University Press.

Brown, S. R., & Ungs, T. D. (1970). Representativeness and the study of political behavior: An application of Q technique to reactions to the kent state incident. *Psychological Record. 20*, 179-189.

Buell, L. H. (1981). *The identification of outdoor adventure leadership*

competencies for entry-level and experience-level personnel. Unpublished
   doctoral dissertation, University of Massachusetts, MA.

Cameron, J. (2002). *Wilderness trip co-leadership.* [Online] Available email:
   christel_rilling@yahoo.ca from jcameron@hotmail.com, February 4.

Campbell, T. C. (1996). Investigating structures underlying relationships when
   variables are not the focus: Q-technique and other techniques. In B.
   Thompson (Ed.), *Advances in Social Science Methodology vol.4*, (pp. 207-
   218). Greenwich, Connecticut: JAI Press.

Carless, S. A. (1998). Assessing the discriminant validity of transformational
   leader behaviour as measured by the MLQ. *Journal of Occupational and
   Organizational Psychology. 71(4)*, 353-358.

Carlyle, T. (1841). *On heroes and hero-worship.* Boston, MA: Adam.

Cashel, C. (1994). Moods of outdoor short course participants. In L. McAvoy, L.
   A. Stringer, & A. Ewert (Eds.), *Coalition for Education in the Outdoors
   Research Symposium Proceedings*, 2nd, (pp. 80-82). Bradford Woods,
   Indiana.

Castle, C. (1913). A statistical study of eminent women. *Archives of Psychology,
   7.*

Clark, R. W. (1999). *Effective professional development schools.* San Francisco:
   Jossey-Bass.

Davis, B. D. & Chaney, L. H. (1993). Problems of corporate training and development personnel. *Office Systems Research Journal. 11(3)*, 26-33.

DeGraaf, D. G., Jordan, D. J., & DeGraaf, K. H. (1999). *Programming for parks, recreation, and leisure services: A servant leadership approach.* State College, PA: Venture Publishing.

Den Hartog, D. N., Van Muijen, J. J., & Koopman, P. L. (1997). Transactional versus transformational leadership: An analysis of the MLQ. *Journal of Occupational and Organizational Psychology. 70(1)*, 19-29.

Dering, N. Z. (1998). Leadership in quality organizations. *The Journal for Quality and Participation. 21(1)*, 32-35.

Dreher, D. (1997). *The tao of personal leadership.* New York: HarperBusiness.

Dubinsky, A. J., Yammarino, F. J., & Jolson, M. A. (1995). An examination of linkages between personal characteristics and dimensions of transformational leadership. *Journal of Business and Psychology. 9(3)*, 315-335.

Fernandez, C. F. & Vecchio, R. P. (1997). Situational leadership theory revisited: A test of an across-jobs perspective. *Leadership Quarterly. 8(1)*, 2-10.

Flanagan, J. C. (1954) The critical incident technique. *Psychological Bulletin. 4*, 327-358. as cited in Parker, J. (1995). Secondary teachers' views of effective teaching in physical education. *Journal of Teaching in Physical*

Education. 14(2), 127-139.

Fulton, R. (1995). *Common sense leadership*. Berkeley, California: Ten Speed Press.

Galpin, T., & McEwen, D. (1987). How skilled is skilled?: Outdoor adventure leaders rate their competency. In J. Meier, T. Morash, & G. Welton (Eds.), *High Adventure Outdoor Pursuits* 2nd ed., (pp. 468-480). Columbus, OH: Publishing Horizons.

Gardner, W. L., & Cleavenger, D. (1998). The impression management strategies associated with transformational leadership at the world-class level: A psychohistorical assessment. *Management Communication Quarterly. 12(1)*, 3-41.

Gilligan, C. (1982). *In a different voice: Psychological theory and women's development*. Cambridge, MA: Harvard University Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New York: Aldine de Gruyter. as cited in Borthwick, A. G. (1995). School-university-community collaboration: Establishing and maintaining partnerships for school improvement. Paper presented at the *Annual Meeting of the American Educational Research Association*. San Francisco,CA.

Goleman, D. (1995). *Emotional intelligence*. New York, NY: Bantam. as cited in Sosik, J. J., & Megerian, L. E. (1999). Understanding leader emotional

intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group and Organization Management. 24(3)*, 367-390.

Goodman, L. A., & Kruskal, W. H. (1979). *Measures of association for cross classifications.* New York: Springer-Verlag.

Green, P. (1981). *The content of a college-level outdoor leadership course for land-based outdoor pursuits in the pacific northwest: A delphi consensus.* Unpublished doctoral dissertation, University of Oregon, OR.

Greenleaf, R. K. (1977). *Servant leadership: A journey into the nature of legitimate power and greatness.* New York: Paulist Press.

Heenan, D. A., & Bennis, W. (1999). *Co-leaders: The power of great partnerships.* New York: John Wiley and Sons.

Henderson, K. (1996). Feminist perspectives on outdoor leadership. In K. Warren (Ed.), *Women's Voices in Experiential Education*, (pp. 107-117). Dubuque, IO: Kendall/Hunt.

Hersey, P., & Blanchard, K. H. (1974). So you want to know your leadership style? *Training and Development Journal. 28(2)*, 1-15.

Hohenbrink, J., Johnston, M., & Westhoven, L. (1997). Collaborative Teaching of a social studies methods course: Intimidation and change. *Journal of Teacher Education. 48(4)*, 293-300.

Hollander, E. P. (1987). College and university leadership from a social psychological perspective: A transactional view. *Paper, Invitational Interdisciplinary Colloquium on Leadership in Higher Education*, National Center for Postsecondary Governance and Finance, Columbia University, New York. as cited in Bass, B. (1990). *Bass and Stogdill's handbook of leadership*. New York: The Free Press.

Homans, G. C. (1950). *The human group*. New York: Harcourt, Brace. as cited in Stogdill, R. (1974). *Handbook of leadership: A survey of theory and research*. New York: Macmillan.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated business-unit performance. *Journal of Applied Psychology. 78*, 891-902.

Jordan, D. J. (2001). *Leadership in leisure services: Making a difference* (2nd ed.). State College, PA: Venture.

Jordan, D. J. (1992). Effective leadership for girls and women in outdoor recreation. *Journal of Physical Education, Recreation and Dance. 63(2)*, 61-64.

Jordan, D. J. (1989). A new vision for outdoor leadership theory. *Leisure Studies, 8*, 35-47.

Kemp, M. (2001). *Co-leadership experiences*. [Online] Available email:

christel_rilling@yahoo.ca from mkemp@hotmail.com, October 25.

Klenke, K. (1996). *Women and leadership*. New York: Springer.

Kohlberg, L. (1981). *The philosophy of moral development: Essays in moral development (Vol. 1)*. New York: Harper & Row.

Kolodny, R. (1980). The dilemma of co-leadership. *Social Work with Groups, 3(4)*, 31-34.

Lewin, K., Lippitt, R., & White, R. K. (1939). Patterns of aggressive behavior in experimentally created social climates. *Journal of Social Psychology. 10*, 271-301. as cited in Bass, B. (1990). *Bass and Stogdill's handbook of leadership*. New York: The Free Press.

Loden, M. (1985). *Feminine leadership, or how to succeed in business without being one of the boys*. New York: Times Books.

McAvoy, L. H. (1987). Education for outdoor leadership. In J. F. Meier, T. W. Morash, & G. E. Welton (Eds.), *High Adventure Outdoor Pursuits* (pp. 459-467). Columbus, OH: Publishing Horizons.

McGee, T. F., & Schuman, B. N. (1970). The nature of the co-therapy relationship. *International Journal of Group Psychotherapy, 20*, 25-36.

McGregor, D. (1966). *Leadership and motivation*. Cambridge, MA: M.I.T. Press.

McKeown, B., & Thomas, D. (1988). *Q methodology: Quantitative applications in the social sciences*. Newbury Park, California: Sage.

152

Merriam, S. B. (1988). *Case study research in education: A qualitative approach.* San Francisco, CA: Jossey-Bass. as cited in Borthwick, A. G. (1995). School-university-community collaboration: Establishing and maintaining partnerships for school improvement. *Annual Meeting of the American Educational Research Association.* San Francisco,CA.

Mills, T. M. (1964). *Group transformation: An analysis of a learning group.* Englewood Cliffs, N. J.: Prentice-Hall. as cited in Winter, S. K. (1976). Developmental stages in the roles and concerns of group co-leaders. *Small Group Behavior, 7,* 349-363.

Mullan, H., & Rosenbaum, S. (1979). *Group psychotherapy* (2nd ed.). New York: Free Press. as cited in Kolodny, R. (1980). The dilemma of co-leadership. *Social Work with Groups, 3(4),* 31-34.

Nair, K. (1994). *A higher standard of leadership.* San Francisco: Berrett-Koehler.

Nosko, A., & Wallace, R. (1997). Female/male co-leadership in groups. *Social Work with Groups, 20(2),* 3-16.

Parker, J. (1995). Secondary teachers' views of effective teaching in physical education. *Journal of Teaching in Physical Education. 14(2),* 127-139.

Priest, S. (1985). Effective outdoor leadership: A survey. *The Journal of Experiential Education. 8(1),* 13-15.

Priest, S. (1987). An international survey of outdoor leadership preparation.

Journal of Experiential Education, 10(2), 34-39.

Riggins, R. D. (1985). The Colorado Outward Bound School: Biographical and personality factors contributing to the leadership effectiveness of instructors. *Journal of Environmental Education, 16(3)*, 6-11.

Silberstein, M. A. (1981). *The impact of interpersonal orientation compatibility and birth order compatibility on group coleader satisfaction*. Unpublished doctoral dissertation, Boston University School of Education, Massachussetts.

Schmolck, P. (2000). *PQMethod – 2.06*. Adapted from Mainframe-Program QMethod by John Atkinson at KSU, KS.

Sosik, J. J., Avolio, B. J., & Kahai, S. S. (1997). Effects of leadership style and anonymity on group potency and effectiveness in a group decision support system environment. *Journal of Applied Psychology. 82(1)*, 89-103.

Sosik, J. J., & Megerian, L. E. (1999). Understanding leader emotional intelligence and performance: The role of self-other agreement on transformational leadership perceptions. *Group and Organization Management. 24(3)*, 367-390.

Spears, L. (1995). Servant leadership and the Greenleaf legacy. In L. Spears (Ed.), *Reflections on Leadership: How Robert K. Greenleaf's Theory of Servant Leadership influenced today's top management thinkers* (pp. 1-16). New York, NY: John Wiley & Son.

Stempler, B. L. (1993). Supervisory co-leadership: An innovative model for teaching the use of social group work in clinical social work training. *Social Work with Groups, 16(3)*, 97-110.

Stephenson, W. (1975). *Newton's fifth rule*. Unpublished manuscript.

Stogdill, R. (1974). *Handbook of leadership: A survey of theory and research.* New York: Macmillan.

Swiderski, M. (1981). *Outdoor leadership competencies identified by outdoor leaders in five western regions*. Unpublished doctoral dissertation, University of Oregon, OR.

Tuckman, A., & Finkelstein, H. (1999). Super-vision insights: Brief commentaries on supervision-simultaneous roles: When group co-therapists also share a supervisory relationship. *The Clinical Supervisor, 18(2)*, 185-201.

Veal, M. L., & Rikard, L. (1998). Cooperating teachers' perspectives on the student teaching triad. *Journal of Teacher Education, 49(2)*, 108-119.

Wagstaff, M. (1997). *Outdoor leader self-awareness and its relationship to co-leaders' perceptions of influence*. Unpublished doctoral dissertation, Oklahoma State University, Stillwater.

Waldman, E. (1980). Co-leadership as a method of training: A student's point of view. *Social Work with Groups, 3(1)*, 51-58.

Winitzky, N., Sheridan, S., Crow, N., Welch, M., & Kennedy, C. (1995).

Interdisiplinary collaboration: Variations on a theme. *Journal of Teacher Education, 46(2)*, 109-119.

Winter, S. K. (1976). Developmental stages in the roles and concerns of group co-leaders. *Small Group Behavior, 7*, 349-363.

Wofford, J. C., Goodwin, V. L., & Whittington, J. L. (1998). A field study of a cognitive approach to understanding transformational and transactional leadership. *Leadership Quarterly. 9(1)*, 55-84.

Woods, F. A. (1913). *The influence of monarchs.* New York: Macmillan. as cited in Bass, B. (1990). *Bass and Stogdill's handbook of leadership.* New York: The Free Press.

Yalom, I. D. (1975). *Theory and practice of group psychotherapy* (2nd ed.). New York: Basic Books. as cited in Kolodny, R. (1980). The dilemma of co-leadership. *Social Work with Groups, 3(4)*, 31-34.

APPENDIXES

APPENDIX A

TECHNICAL SKILLS
1. safety minded
2. ability to handle wilderness emergency situations
3. ability to read map and compass
4. proper selection and care of equipment and clothing
5. outdoor living skills, eg. shelter construction, backcountry cooking
6. ability to teach skills
7. technical skills to match trip environment

INTERPERSONAL SKILLS
8. provide constant support
9. promote the fun in tasks
10. ability to create a balance, eg. energy, mood
11. empathy, genuine caring
12. ability to effectively handle conflict
13. ability to put aside ego to work for a common goal
14. being 'in sync', ability to build a synchronous relationship
15. mutual respect that can go beyond trip
16. being 'real' with each other, exhibiting honesty and integrity, being unpretentious
17. **ability to communicate openly**

CONCEPTUAL SKILLS
18. promote a sense of community and cooperative spirit, think in terms of "we" not "I"
19. enable others to realize a higher level of potential
20. ability to encourage leadership in others
21. self-actualizer, constant effort to maximize personal growth by learning from one's own, and others' experiences
22. self awareness, knowing how one's self will think, feel, and act in different situations
23. ability to share ownership of problems and solutions
24. a good decision maker
25. ability to inspire a shared vision
26. continually view surroundings from new perspectives
27. a large measure of creativity

ENVIRONMENTAL
28. high level of comfort in the outdoor environment
29. respect for trip environment
30. knowledge of environment where trip is occurring
31. passion/love for the outdoors
32. familiarity of environment where trip is occurring
33. ability to teach others about the outdoors
34. personal environmental philosophy and values/ethics

35.   knowledge of organization's philosophy, policies and procedures concerning environment

TRAITS

36.   a good sense of humor
37.   calmness, patience
38.   charisma
39.   flexibility of thought and leadership style
40.   self confidence
41.   100% trustworthy and dependable
42.   top physical condition
43.   courage
44.   emotional maturity

APPENDIX B

Q-Sort Directions

1. You have been handed an envelope with 44 pieces of paper, each one containing a unique statement. You have also been handed a matrix sheet and Q-sort directions. Please be sure you have all three items. Please read through the Q-sort directions before you begin.

2. You will start with "Condition of Instruction 1" on the matrix sheet.

3. Next, empty the statements from the envelope and read through all of the statements. As you are reading:

4. Sort the statements into three piles: A, B, and C.

    A. The statements that are MOST LIKE your views of "What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?" place in a pile to the RIGHT of your matrix sheet.

    B. The statements that are MOST UNLIKE your views of "What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?" place in a pile to the LEFT of your matrix sheet.

    C. The statements that you are either neutral, ambivalent, or uncertain about, place in a pile in the MIDDLE of your matrix sheet.

5. From the pile to your RIGHT, select 3 statements that you feel are the MOST LIKE your views. Write the statement numbers in the 3 boxes above the +5 position on your matrix sheet. The vertical order of the statements does not matter.

6. Next, turn to the pile on your LEFT and select 3 statements that you feel are MOST UNLIKE your views. Write the statement numbers in the 3 boxes above the –5 position. Remember, the vertical order of the statements does not matter.

7. Return to the pile on your RIGHT and select the next 3 statements from the remaining items that you feel are most like your views. Write the statement numbers in the 3 boxes above the +4 position. Remember, the vertical order of the statements does not matter.

8. Turn to the pile on your LEFT and select the next 3 statements from the remaining items that you feel are most unlike your views. Write the statement numbers in the 3 boxes above the –4 position.

9. Repeat this process until both piles are gone.

10. Next, write the neutral statement numbers from the CENTER pile into the remaining MIDDLE boxes of the matrix sheet.

11. When you have finished, look at your arrangement of the statement numbers on your matrix sheet. Feel free to change any of the item numbers so they are exactly where you want them. The statements can only be used once. Leave no box empty.

Please reshuffle your statements for your second Q-sort!

1. Now, you will look at "Condition of Instruction 2" on the matrix sheet.

2. Next, re-read through all of the statements. As you are reading:

3. Sort the statements into three piles: A, B, and C.

    A. The statements that are MOST LIKE your views of "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?" place in a pile to the RIGHT of your matrix sheet.

    B. The statements that are MOST UNLIKE your views of "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?" place in a pile to the LEFT of your matrix sheet.

    C. The statements that you are either neutral, ambivalent, or uncertain about, place in a pile in the MIDDLE of your matrix sheet.

4. Follow procedures 5 to11 of your first Q-sort.

Please write down any thoughts and feelings about the Q-sorts on the Comments sheet.

Thank you for your time and energy!

APPENDIX C

PILOT Q-SORT SCORE SHEET
Place the number of the item statement in the Q-sort distribution below.
Numbers may be used only once on each matrix form.

Condition of Instruction 1: What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
MOST UNLIKE					NEUTRAL					MOST LIKE

Condition of Instruction 2: What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
MOST UNLIKE					NEUTRAL					MOST LIKE

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APPENDIX D

1. Safety minded above all else

2. Ability to handle wilderness emergency/crisis situations

3. Ability to read map and compass

4. Outdoor living/survival skills, eg. shelter construction, backcountry cooking

5. Making sure people are constantly learning

6. Technical skills to match trip environment

7. Provide constant support

8. Promote the fun in tasks, because people are more engaged when they are having fun

9. Ability to create a balance, eg. energy, mood

10. Empathy, genuine caring for all things

11. Ability to effectively handle personal conflict

12. Ability to put aside ego to work for a common goal

13. Being 'in sync', ability to build a synchronous relationship

14. Being 'real' with each other, exhibiting honesty and integrity, being unpretentious

15. Ability and willingness to communicate openly

16. Promote a sense of community and cooperative spirit, think in terms of "we" not "I"

17. Enable others to realize a higher level of potential

18. Self-actualizer, constant effort to maximize personal growth by always learning

19. Self awareness, knowing how one's self will think, feel, and act in different situations

20. Ability to share ownership of problems and solutions

21. A good decision maker

22. Continually view surroundings from new perspectives

23. A large measure of creativity

24. High level of comfort in the outdoor environment

25. Knowledge of, and familiarity with the trip environment

26. Passion/love for the outdoors

27. Personal environmental philosophy and values/ethics

28. Knowledge of organization's philosophy, policies and procedures concerning environment

29. A positive and timely sense of humor

30. Calmness, patience

31. Charisma

32. Ability to be flexible with leadership style

33. Must be 100% trustworthy and dependable

34. Top physical condition

35. Courage

36. Emotional maturity as opposed to actual age

APPENDIX E

Q-Sort Directions

1. You have been handed an envelope with 36 pieces of paper, each one containing a unique statement. You have also been handed a matrix sheet, Q-sort directions, and a score sheet. Please be sure you have all four items.

2. You will start with "Condition of Instruction 1" that asks the question, " What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?"

3. Next, read through all of the 36 statements. As you are reading:

4. Sort the statements into three piles:

   A. The statements that are MOST LIKE your views of "What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?" place in a pile to the RIGHT of your matrix sheet.

   B. The statements that are MOST UNLIKE your views of "What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?" place in a pile to the LEFT of your matrix sheet.

   C. The statements that you are either neutral, ambivalent, or uncertain about place in a pile in the MIDDLE of your matrix sheet.

5. From the pile to your RIGHT, select 3 statements that you feel are the MOST LIKE your views. Place the statements in the 3 boxes above the +4 position on the matrix. The vertical order of the statements does not matter.

6. Next, turn to the pile on your LEFT and select 3 statements that you feel are MOST UNLIKE your views. Place the statements in the 3 boxes above the –4 position. Remember, the vertical order of the statements does not matter.

7. Return to the pile on your RIGHT and select 3 statements from the remaining items. Place the statements in the 3 boxes above the +3 position.

8. Turn to the pile on your LEFT and select 3 statements from the remaining items. Place the statements in the 3 boxes above the –3 position.

9. Repeat this process until both piles are gone.

10. Next, place the neutral statements from the CENTER pile into the remaining MIDDLE boxes of the matrix sheet.

11. When you have finished, look at your arrangement of the statements on the matrix. Feel free to move any of the items so they are exactly where you want them.

12. Write the number of each item into it's corresponding box on the score sheet. The statements can only be used once. Leave no box empty.

Please reshuffle your statements for your second Q-sort!

1. Now, you will look at "Condition of Instruction 2" that asks the question, "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?"

2. Next, read through all of the statements. As you are reading:

3. Sort the statements into three piles:

   A. The statements that are MOST LIKE your views of "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?" place in a pile to the RIGHT of your score sheet.

   B. The statements that are MOST UNLIKE your views of "What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?" place in a pile to the LEFT of your score sheet.

   C. The statements that you are either neutral, ambivalent, or uncertain about place in a pile in the MIDDLE of your score sheet.

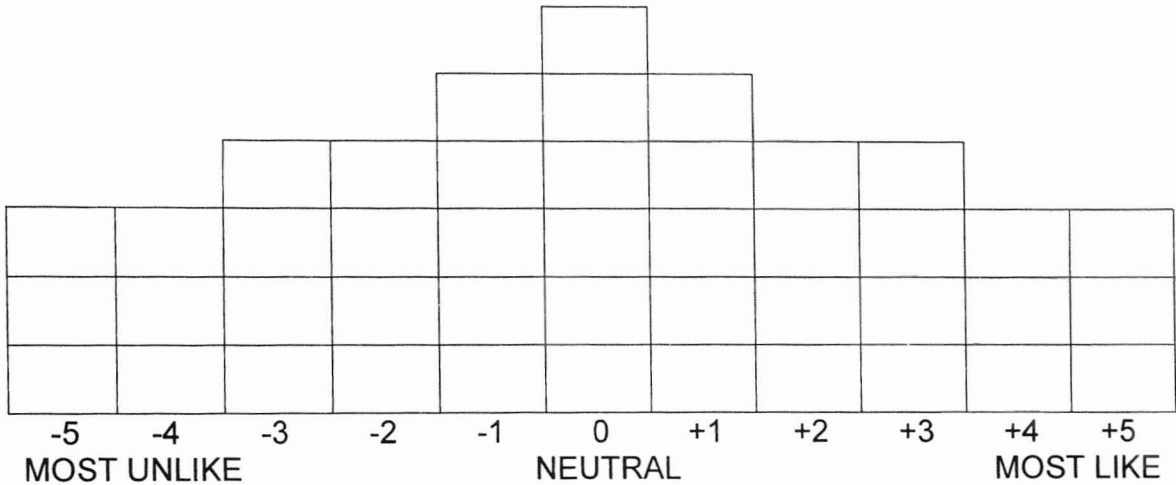4. Follow procedures 5 to 12 of your first Q-sort.
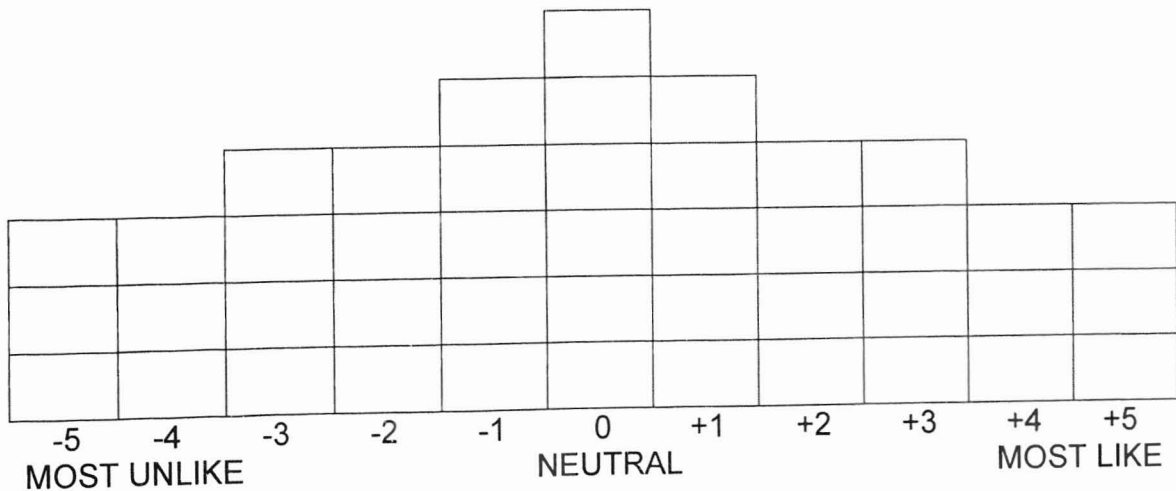
Thank you for your time and energy!

APPENDIX F

Q-SORT SCORE SHEET

Place the number of the item statement in the Q-sort distribution below. Numbers may be used only once on each matrix form.

1. <u>Condition of Instruction 1:</u> What are the most important skills and traits for you to possess as an outdoor leader on an extended expedition?

-4	-3	-2	-1	0	+1	+2	+3	+4
MOST UNLIKE   NEUTRAL   MOST LIKE

2. <u>Condition of Instruction 2:</u> What are the most important skills and traits you are looking for in a person who will co-lead with you on an extended expedition?

-4	-3	-2	-1	0	+1	+2	+3	+4
MOST UNLIKE   NEUTRAL   MOST LIKE
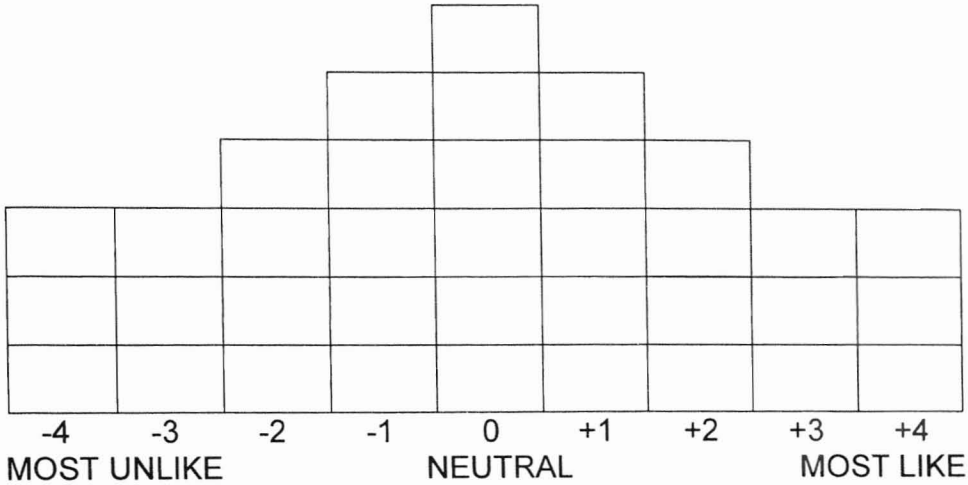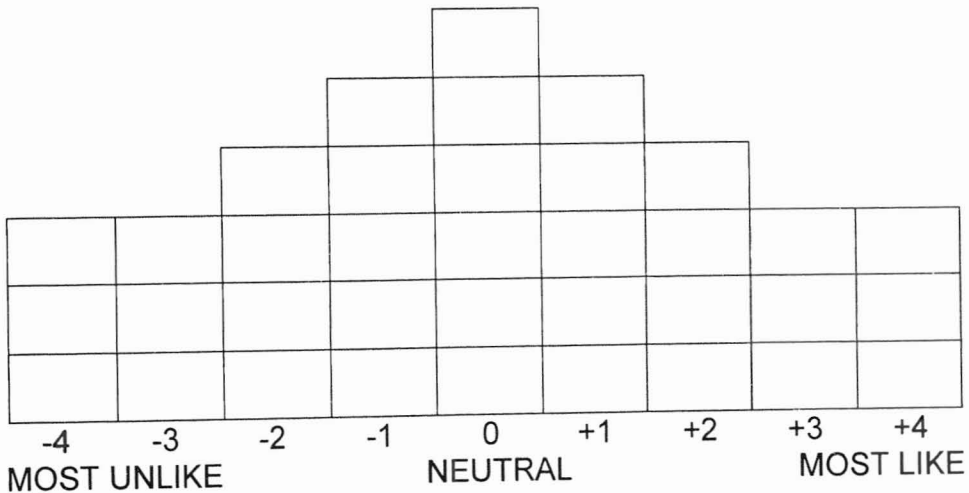
3. What else would you like to tell me about this topic?

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APPENDIX G

Consent Form

Dear Participant,

I am conducting my thesis research on outdoor trip leaders' perceptions of the most important skills and traits they and their co-leaders should possess on an extended expedition. Your participation in this study will involve rank ordering 36 statements on this topic. The process may take approximately one hour to complete. I will be present in the room during this process. Prior to sorting the statements, you will complete a personal information sheet. During and after the sorting process, any verbalized thoughts and feelings about the statements and the process may be recorded on paper by the researcher. You will also complete a post-sort question. This information will assist the researcher in gaining more understanding in the interpretation of the data. The knowledge gained from this investigation is hoped to provide outdoor professionals with information on what trip leaders want in a co-leader in order that they may match their leaders more effectively in the field and include the skills deemed important into leadership training programs.

If you agree to participate your responses will be kept CONFIDENTIAL. Your name will not be associated with your personal information, your Q-sorts, your post-sort question, or research notes. The personal information and the Q-sorts will be destroyed one year after this process.

There are no risks involved. The personal information, sorting, and feedback are completely voluntary. You may stop this process at any time.

Questions about this research may be directed to: Christel Rilling at 72-B Martin Ave., Guelph, ON N1G 2A2, (519) 821-0160 or christel_rilling@yahoo.ca; Dr. Deb Jordan at 107 Colvin Center, Oklahoma State University, Stillwater OK 74078, (405) 744-5499 or debraj@okstate.edu; or to Sharon Bacher, executive secretary of the Institutional Review Board, 203 Whitehurst, Oklahoma State University, Stillwater OK, 74078, (405) 744-5700 or sbacher@okstate.edu .

If you agree to participate in this study, please read and sign the statement below. The completion of this consent form will give the researcher permission to proceed with the data gathering process and utilize your Q-sort and comments for the research.

This information is printed on an additional sheet that is yours to keep. Thank you for your cooperation.

Christel Rilling

I understand that my participation in this study is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw at any time without penalty.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy of this consent form has been given to me.

Date:_____   Time:_____

Signature:_____

Witness:_____

APPENDIX H

INFORMATION SHEET

This information will be kept strictly CONFIDENTIAL. Thank you for helping me to better understand your responses to this research. Please remember, your name will never be connected to the information you have provided.

1. Age: (circle)   18 –25   26 –35   36-45   46+ older

2. Sex: (circle)   F   M

3. Ethnicity: _____   Prefer not to disclose _____

4. Occupation: _____

5. Highest Degree: (circle)   High school   Associates degree   Bachelors degree

      Master's degree   Doctorate   Other _____

6. How many years have you been a trip leader? (circle)   less than 1   1-2 years

      between 2 and 5 years   between 5 and 10 years   more than 10 years

7. What types of extended trips do you lead? (e.g. hiking, skiing, canoeing)

8. For whom do you lead trips? (circle all that apply)   Self (personal)   Youth groups

      Private outfitter   Commercial outfitter   Other _____

9. What is the primary purpose (goals) of your wilderness trips? (circle all that apply)

Education   Cultural development   Rehabilitation

      Excitement/adventure   Other _____

10. On what percentage of extended trips do you lead with a co-leader? (circle)

never   less than 25% of the time   between 26% and 50% of the time

between 51% and 75% of the time   between 76% and 99% of the time   always

11. Who pairs you with your co-leader? (circle)   I choose my co-leader

      My employer pairs us   Other leaders choose me   Other _____

12. On average, how much time do you spend with your co-leader negotiating roles?
      none   less than one hour   between one and three hours
      between three and five hours one day between one and two days more than two days

APPENDIX I

Correlation Matrix Between Sorts

SORTS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
1 01ML	100	100	58	36	35	37	5	-15	8	29	21	6	39	4	21	21	59	44	5	-8	21	17	-14	-7	29	33	36	10	30	19	32	15	-4	-2
2 01MCL	100	100	58	36	35	37	5	-15	8	29	21	6	39	4	21	21	59	44	5	-8	21	17	-14	-7	29	33	36	10	30	19	32	15	-4	-2
3 02ML	58	58	100	45	33	28	8	-17	28	15	19	17	25	-3	-7	-7	48	38	11	9	13	10	9	5	9	22	13	13	46	39	34	16	-13	-19
4 02MCL	36	36	45	100	35	36	5	2	-4	-14	7	30	47	26	-9	-9	65	46	-3	-11	16	5	9	17	28	17	16	22	15	22	27	27	1	6
5 03FL	35	35	33	35	100	70	6	-9	33	33	7	8	33	28	-15	-15	55	28	-8	-12	-4	-8	-4	10	36	14	10	1	22	20	32	6	-11	-17
6 03FCL	37	37	28	36	70	100	28	3	33	11	7	10	41	31	-8	-8	47	35	10	18	21	22	-2	8	47	24	23	14	22	21	22	12	-13	-9
7 04FL	5	5	8	5	6	28	100	60	3	7	-3	-6	18	22	-1	-1	7	36	32	28	20	19	-7	1	20	7	7	-7	27	38	6	-5	5	15
8 04FCL	-15	-15	-17	2	-9	3	60	100	-2	2	-15	18	18	52	11	11	2	26	27	30	19	47	33	36	30	27	18	28	1	27	-2	40	27	48
9 05FL	8	8	28	-4	33	33	3	-2	100	43	17	24	19	31	17	17	23	27	11	23	12	21	-4	7	16	23	26	15	17	18	24	5	-2	3
10 05FCL	29	29	15	-14	33	11	7	2	43	100	23	11	16	28	16	16	11	29	4	3	6	12	2	7	-10	20	23	-7	20	21	22	16	12	15
11 06FL	21	21	19	7	7	7	-3	-15	17	23	100	31	12	-2	31	31	20	23	-3	16	37	6	21	32	22	18	30	18	37	33	41	16	10	16
12 06FCL	6	6	17	30	8	10	-6	18	24	11	31	100	33	51	21	21	32	52	30	23	27	37	23	42	30	35	49	58	28	40	58	68	18	29
13 07FL	39	39	25	47	33	41	18	18	19	16	12	33	100	69	19	19	58	54	24	35	51	44	14	20	43	67	65	54	25	32	34	51	13	22
14 07FCL	4	4	-3	26	28	31	22	52	31	28	-2	51	69	100	20	20	25	55	26	43	37	63	36	48	36	59	56	56	5	18	25	64	27	48
15 08ML	21	21	-7	-9	-15	-8	-1	11	17	16	31	21	19	20	100	100	20	35	49	40	15	39	-4	6	15	40	52	36	10	14	30	37	31	28
16 08MCL	21	21	-7	-9	-15	-8	-1	11	17	16	31	21	19	20	100	100	20	35	49	40	15	39	-4	6	15	40	52	36	10	14	30	37	31	28
17 09ML	59	59	48	65	55	47	7	2	23	11	20	32	58	25	20	20	100	55	21	1	30	25	-1	6	49	37	40	35	21	29	36	30	-11	-8
18 09MCL	44	44	38	46	28	35	36	26	27	29	23	52	54	55	35	35	55	100	36	33	28	48	8	21	26	42	50	37	27	46	43	46	12	38
19 10ML	5	5	11	-3	-8	10	32	27	11	4	-3	30	24	26	49	49	21	36	100	69	17	52	-9	3	15	30	33	33	16	27	15	33	29	9
20 10MCL	-8	-8	9	-11	-12	18	28	30	23	3	16	23	35	43	40	40	1	33	69	100	34	68	10	16	21	44	44	51	17	22	4	33	38	34
21 11ML	21	21	13	16	-4	21	20	19	12	6	37	27	51	37	15	15	30	28	17	34	100	55	36	29	31	43	47	45	7	6	17	28	5	18
22 11MCL	17	17	10	5	-8	22	19	47	21	12	6	37	44	63	39	39	25	48	52	68	55	100	34	35	36	54	59	69	1	6	3	52	18	41
23 12FL	-14	-14	9	9	-4	-2	-7	33	-4	2	21	23	14	36	-4	-4	-1	8	-9	10	36	34	100	84	6	22	7	40	-20	2	-7	43	6	23
24 12FCL	-7	-7	5	17	10	8	1	36	7	7	32	42	20	48	6	6	6	21	3	16	29	35	84	100	16	23	21	44	-10	11	3	54	17	34
25 13ML	29	29	9	28	36	47	20	30	16	-10	22	30	43	36	15	15	49	26	15	21	31	36	6	16	100	58	38	40	27	26	23	32	-26	-2
26 13MCL	33	33	22	17	14	24	7	27	23	20	18	35	67	59	40	40	37	42	30	44	43	54	22	23	58	100	60	54	32	39	24	62	1	31
27 14ML	36	36	13	16	10	23	7	18	26	23	30	49	65	56	52	52	40	50	33	44	47	59	7	21	38	60	100	72	14	15	44	59	31	33
28 14MCL	10	10	13	22	1	14	-7	28	15	-7	18	58	54	56	36	36	35	37	33	51	45	69	40	44	40	54	72	100	2	14	28	62	26	40
29 15ML	30	30	46	15	22	22	27	1	17	20	37	28	25	5	10	10	21	27	16	17	7	1	-20	-10	27	32	14	2	100	79	39	16	12	7
30 15MCL	19	19	39	22	20	21	38	27	18	21	33	40	32	18	14	14	29	46	27	22	6	6	2	11	26	39	15	14	79	100	33	29	18	32
31 16FL	32	32	34	27	32	22	6	-2	24	22	41	58	34	25	30	30	36	43	15	4	17	3	-7	3	23	24	44	28	39	33	100	45	1	-3
32 16FCL	15	15	16	27	6	12	-5	40	5	16	16	68	51	64	37	37	30	46	33	33	28	52	43	54	32	62	59	62	16	29	45	100	18	40
33 17FL	-4	-4	-13	1	-11	-13	5	27	-2	12	10	18	13	27	31	31	-11	12	29	38	5	18	6	17	-26	1	31	26	12	18	1	18	100	61
34 17FCL	-2	-2	-19	6	-17	-9	15	48	3	15	16	29	22	48	28	28	-8	38	9	34	18	41	23	34	-2	31	33	40	7	32	3	40	61	100

Oklahoma State University
Institutional Review Board

Protocol Expires: 11/7/02

Date: Thursday, November 08, 2001   IRB Application No   ED0235

Proposal Title: THE MOST IMPORTANT CO-LEADERS SKILLS AND TRAITS ON EXTENDED
OUTDOOR EXPEDITIONS AS PERCEIVED BY LEADERS

Principal
Investigator(s):

Christel Rilling   Debra Jordan
107 Colvin   107 Colvin
Stillwater, OK 74078   Stillwater, OK 74078

Reviewed and
Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI :

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact Sharon Bacher, the Executive Secretary to the IRB, in 203 Whitehurst (phone: 405-744-5700, sbacher@okstate.edu).

Sincerely,

Carol Olson, Chair
Institutional Review Board

$\mathcal{V}$

VITA

Christel Rilling

Candidate for the Degree of

Master of Science

Thesis: THE MOST IMPORTANT CO-LEADER SKILLS AND TRAITS ON
EXTENDED OUTDOOR EXPEDITIONS AS PERCEIVED BY LEADERS

Major Field: Health, Physical Education, and Leisure

Biographical:

Education: Received Bachelor of Science degree in Plant Protection from the
University of Guelph, Guelph, Ontario in June 1990. Completed the
requirements for the Master of Science degree with a major in Health,
Physical Education, and Leisure at Oklahoma State University in
December, 2002.

Experience: Employed by Oklahoma State University, Department of Agronomy
as a research technician from 1991 to 1997; Oklahoma State
University's Outdoor Adventure as an outdoor trip leader and challenge
course instructor from 1996 to 2000; Adventureworks!, Ancaster, as an
outdoor adventure programmer from 2000 to present.

Professional Memberships: Association for Experiential Education.