

OUTDOOR LEADER SELF-AWARENESS AND ITS
RELATIONSHIP TO CO-LEADERS'
PERCEPTIONS OF INFLUENCE

By

MARK WAGSTAFF

Bachelor of Science
North Carolina State University
Raleigh, NC
1981

Master of Science
North Carolina State University
Raleigh, NC
1988

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Dissertation Approved:

Christine Cashel

Thesis Advisor

Diane Montgomery

Ronald Beer

Orvell Carday

Judith E. Dobson

Thomas C. Collins

Dean of the Graduate College

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CHAPTER 1

INTRODUCTION

Overview

The burgeoning field of adventure education increases in popularity as more people realize the benefits of high-adventure activities. Wilderness expeditions, whitewater trips, rockclimbing and challenge courses serve as mediums for non-traditional education and therapeutic programs. Educators late in the twentieth century are relearning the value of ancient teaching techniques which place young people in challenging situations to develop leadership, citizenship and life skills (Miles & Priest, 1990). Leaders of modern-day adventure education activities typically utilize an experiential learning process to produce varying outcomes. Intended outcomes are positive changes in self-concept (Bacon, 1988; Clifford & Clifford, 1967; Crume, 1983; Ewert, 1983; Kaplan & Talbot, 1983; Moses & Peterson, 1970) , self-efficacy and self-confidence (Darst & Armstrong, 1980; Ewert, 1986; Harmon, 1974; Harmon & Templin, 1987) and self-actualization (Kaplan, 1974; Kaplan & Kaplan, 1983; Young & Crandall, 1984). To increase the chances of achieving such changes, effective leadership is essential.

While educators are pursuing the positive effects of outdoor adventure, more of the public than ever before is engaging in outdoor recreation causing an increase in accidents, environmental impact, and negative experiences (Ford & Blanchard, 1985; Miles & Priest, 1990; Nash, 1982). Preparing individuals to lead effective adventure education activities represents a critical issue among adventure education professionals to ensure that program quality, participant safety and environmental stewardship are increased (Cockrell, 1991; Petzoldt, 1974; Priest, 1987b). Curricula and guidelines have been developed for the preparation of outdoor leaders (Cockrell, 1991; Drury & Bonney, 1992; Green,

1990). Technical skills, first aid skills, group management skills, communication skills and judgment and decision making comprise the key elements found in these curricula. An area of leadership development that has not received as widespread attention, due to its subjectivity, resides in the realm of intrapersonal leadership development. Especially important as a primary intrapersonal skill, and often neglected, is the role that self-awareness plays in effective leadership.

Background of This Study

The adventure education literature is devoid of empirical studies which focus on the characteristic of leader self-awareness. Yet, the importance of leader self-awareness is explored in other fields, including management (Bennis, 1989; Covey, 1991; Kouzes and Posner, 1993) and psychology (Goleman, 1995). Bennis believes that a person must know him/herself well in order to become an effective leader. Kouzes and Posner equate high levels of leader self-knowledge with credibility. In psychology, the concept of self-awareness receives attention in the popular literature on emotional intelligence. Goleman's (1995) book on emotional intelligence addresses self-awareness as a necessary tool for psychological health. He explains the parallel of the term metacognition used by psychologists to refer to an awareness of thought process, while metamood could be used to encompass the awareness of moods. Goleman prefers to use the broad term of self-awareness as an ongoing attention to one's internal states. He defines self-awareness as, "a self-reflexive, introspective attention to one's own experience, sometimes called mindfulness" (p. 315). A challenge for researchers lies in assessing the depth or level of individual self-awareness and its relationship to the art of leadership.

The purpose of this study is to examine the concept of leader self-awareness. The characteristic of self-awareness constitutes a critical

leadership characteristic that eludes clear definition. To determine self-awareness level of leaders and how this characteristic influences others poses a challenging research task. Adventure education literature supports the importance of leader self-awareness, yet the subjectivity and lack of research provides little common ground for consensus. One way to view the influence of leader self-awareness is through an analysis of leader power as perceived by a co-leader. The co-leader relationship directly influences the development and behavior of a group (Winter, 1976). When leader dyads exhibit functional or dysfunctional behavior, group members react to the behaviors of the leaders. For example, if co-leaders cannot find a method to handle their differences, the group will mirror leader behavior and experience increased difficulty with intermember conflict and differentiation.

The concept of power potentially plays a critical role in influencing the co-leader relationship. "Power is seen as the ability of one party to influence the attitudes and/or behavior of another" (Rahim & Buntzman, 1989, p. 197). Knoop (1992) claims that, "knowledge of one's qualities, character, abilities and effects is a prerequisite for using power effectively. Self-knowledge can shape personality, form character, instill confidence and develop inner strengths" (p. 15). Power can be defined as an influence or exchange relation operationalized by observing the behavior of two or more interacting persons (Stogdill, 1974). To ensure positive, productive influence conducive to group purpose and needs, co-leaders must be self-aware so that power enhances rather than detracts from their relationship.

French and Raven's (1959) description of the five types of power continues to be useful as a way of identifying the types of power. The five types of classic power are as follows:

Reward Power is the ability to give rewards.

Coercive Power is the ability to punish or threaten punishment.

Legitimate Power is based on the position one holds or is given.

Referent Power is when a person is liked or admired (charisma).

Expert Power is based on an individual's knowledge and skills.

Rahim (1988) created the Rahim Leader Power Inventory (RLPI) as a way to assess these five categories of power. The instrument specifically assesses a subordinate's perceptions of her or his supervisor's level of power from low to high. For the purpose of this study, only referent and expert power are studied due to their idiosyncratic connection to personality. Referent and expert power, theoretically, appear to be the primary types of power linked to self-awareness because they are more character and personality based according to Student (1968).

Very few outdoor leadership development programs emphasize trainee introspection and self-critique, while even fewer programs urge seasoned professionals to engage in the reflective and self-discovery process. Self-awareness can not be defined as a finite, inherent attribute such as, "the leader either has self-awareness or he/she does not." For the purpose of this study, the attribute of self-awareness is studied as part of a larger theoretical construct called personality. Dabrowski's (1967) view of personality serves as the model for this study, yet his position differs from most conventional views. Dabrowski rejects the idea that everyone has or is a personality. Rather, he believes that everyone possesses individuality, and personality or full person-hood is a state of higher evolvment which most people fall short. The term self-actualization, or reaching one's fullest potential, encompasses another important theoretical concept which helps explain the notion of individual evolution. Self-awareness is a dynamic attribute that evolves through a human developmental process characterized by higher levels of development (Dabrowski, 1967).

One perspective found in the psychological literature defines self-awareness as being aware of personal values and biases that instigate emotions which drive behaviors (Varhely & Cowles, 1991). Another perspective defines self-awareness as one's ongoing attention to one's internal states so that an awareness exists of both moods and thoughts about the moods (Goleman, 1995). This belief posits that individuals who have clarity about their emotional lives are autonomous, sure of their own boundaries, are in good psychological health, and tend to have a positive outlook on life. An individual's mindfulness or awareness helps them manage their emotions. Both perspectives, have ramifications for explaining an outdoor leader's management of thoughts and emotions while leading. Potential questions which surface when contemplating the influence of leader self-awareness are: (1) how does it affect the leader's effectiveness, (2) how does it affect his or her relationships with co-leaders, or (3) how does it affect the group process and experience?

Kazimierz Dabrowski's (1964, 1967) "Theory of Positive Disintegration", later renamed Dabrowski's "Theory of Emotional Development" (TED), serves as a human developmental theory which includes the aforementioned perspectives of self-awareness into a larger theoretical framework. Dabrowski and Piechowski (1977) describe individual development, which incorporates the concept of self-awareness, within a model consisting of five levels. ". . . At lower levels of its development, personality, self-actualization is determined by the inherited endowment, the growth potential, and the social milieu. At higher levels, however, the 'third factor' takes over and the individual shapes his or her own development by intentional acts and free choices" (Weckowicz, 1988, p. 131). The term self-awareness is described as a characteristic held by a self-actualizing individual found at higher levels of development (Dabrowski & Piechowski, 1977).

The extensive work of Abraham Maslow on the concept of self-actualization as a human need further enriches the view of a more self-aware, more highly developed individual (Maslow, 1968, 1970, 1971). Maslow's work describing self-actualization has been shown to correspond to personality characteristics described in the model of Dabrowski and Piechowski (Brennan & Piechowski, 1991; Piechowski, 1978; Piechowski & Tyska, 1982). The theories of Dabrowski and Maslow provide the conceptual foundation to be used in this study for understanding the concept of leader self-awareness as a human developmental factor.

The theories of Dabrowski and Maslow spawned assessment tools that allow researchers to gain insight into an individual's level of self-awareness. Gage, Morse and Piechowski (1981) created the Definition Response Inventory (DRI) which assesses Dabrowski and Piechowski (1977) five developmental levels of TED. The DRI consists of six open ended questions analyzed by trained raters. The resulting DRI score places an individual in one of five developmental levels. Everett Shostrom (1963) created the Personal Orientation Inventory (POI) to assess Maslow's conception of self-actualization. "The POI consists of 150 two-choice comparative-value-judgment items reflecting values and behavior seen to be of importance in the development of the self-actualizing individual" (Knapp, 1990, p. 2). A premise of the present study is that utilizing the DRI and POI instruments to assess self-awareness in conjunction with the RLPI to assess power as perceived by co-leaders would assist in explaining how self-aware leaders influence co-leader relationships. Assessing the subjective attribute of leader self-awareness and its relationship to co-leaders' perception of power could produce valuable information to improve the process of outdoor leadership development beyond technical skills.

Purpose

The purpose of this study is to examine the relationship between outdoor leader self-awareness and co-leaders' perceptions of leader influence. Self-awareness is considered for this study to be based on Kazimierz Dabrowski's (1967) "Theory of Positive Disintegration" and Abraham Maslow's (1968, 1971) concept of self-actualization. Influence is defined as French and Raven's (1959) categories of expert and referent power. The initial problem was to define and assess levels of outdoor leader self-awareness on a continuum from low levels of self-awareness to high levels of self-awareness. Second, after assessing levels of self-awareness, the task was to discover the relationship between levels of leader self-awareness and perceptions of referent and expert power among co-instructors.

Research Questions

The research questions addressed in this study are:

1. What is the relationship between co-instructors' perceptions of expert and/or referent power and (a) Dabrowskian developmental levels and (b) POI scale scores?
2. What is the relationship between Dabrowskian developmental levels and Maslow self-actualization as determined by the 12 POI scale scores?
3. What is the effect between chronological age and (a) the primary POI scale scores of Time Competence (Tc) and Inner-directed (I), (b) Dabrowskian developmental levels and (c) perceptions of expert or referent power?
4. What is the effect between work experience as an outdoor leader and (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels, and (c) perceptions of expert or referent power?

5. What is the effect between level of education and (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert or referent power?
6. What is the effect between gender and (a) the primary POI scales scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert or referent power?

Significance

This study is important for four specific reasons:

1. Conceptualizing outdoor leader self-awareness and measuring this concept based on Dabrowski's and Maslow's work has relevance for those who train and develop outdoor leaders. Outdoor leader trainers would benefit from current research that supports a developmental approach to training that incorporates personal growth as a primary factor. This study provides initial research that combines a human developmental process with leadership theory.
2. This is one of the first studies to examine the Dabrowski's Theory of Emotional Development (TED) and Maslow's concept of self-actualizing to study leadership influence among co-leaders. Co-leadership is a common practice used in outdoor pursuits to increase group safety and program quality. Yet, co-leader relationships have not been well researched within the outdoor education literature, especially in the social, psychological context of self-awareness.
3. There has been a call among outdoor education researchers to study the concept of leader power among outdoor leaders (Priest & Dixon, 1991). Therefore, the Rahim Leader Power Inventory (RLPI) has been used to assess the variable of (influence) power among outdoor leaders.

4. This is the second study that examines the relationship between measures obtained through the DRI and POI. Beach (1980) compared the DRI and POI assessment tools among a sample of female subjects.

Assumptions

The following assumptions are made in relationship to this study:

1. The Definition Response Inventory (DRI) is a valid and reliable instrument subject to the limitations of self-reporting instruments. Also assumed is that individuals cannot score at a higher level than their actual level of development.
2. The Personal Orientation Inventory (POI) is a valid and reliable instrument for measuring the concept of self-actualization based on the limitations of self-reporting instruments.
3. The Rahim Leader Power Inventory (RLPI) is a valid and reliable instrument. Although developed for subordinates to assess supervisor power, it is assumed that when used in co-leader assessment that the same construct will be measured.
4. The DRI and POI capture the construct of self-awareness within the context of personality development and self-actualization respectively. As respondent scores increase on both the POI and DRI, levels of self-awareness are higher.

Limitations

1. The researcher utilizes an intact sample of outdoor leaders which may not be representative of the larger population of outdoor leaders.
2. The small sample size of 33 leaders used in this study reduces the power of any statistical analyses.
3. Statistical analyses of data are based on measures that have the general limitations of self-report instruments.

4. The RLPI was designed and tested to assess the relationship between supervisors and subordinates. Two applicable sub-scales of the five have been adapted from the original instrument. There is a danger that the validity and reliability of the instrument may be compromised.
5. It is possible that some of the statistically significant results may be due to chance.

Delimitations

1. The sample includes 33 outdoor leaders who serve as part-time challenge course instructors at a large midwestern university. These outdoor leaders facilitate one-day challenge course experiences.
2. The Definition Response Inventory (DRI) used to assess levels of outdoor leader self-awareness has a broader application as an instrument to assess the broader construct of personality.
3. The Personal Orientation Inventory (POI) which also is used to assess outdoor leader self-awareness has the boarder application as an instrument to measure the construct of self-actualization according to Abraham Maslow.

Definitions

1. Outdoor Leader . An individual who educates groups of people in outdoor environments and who utilizes an experientially based pedagogy involving but not limited to activities such as challenge courses, mountaineering or whitewater boating. This individual is responsible for the physical and mental well-being of all group members including co-instructors. For the purpose of this study, the term outdoor leader and adventure educator are interchangeable.

2. Self-Awareness . A dynamic attribute consisting of cognitive and emotional self-knowledge that evolves through a human developmental process.
3. Self-Actualization . A biological and psychological human need for self-fulfillment (Maslow, 1970), characterized by attributes such as a superior perception of reality, the widest possible frame of reference, autonomy, detachment, objectivity, compassion and freedom from enculturation.
4. Power. Is an influence or exchange relation which is operationalized by observing the behavior of two or more interacting persons (Stogdill, 1974).
5. Co-leader. An equal or peer who shares in the total responsibility of managing a groups experience during an adventure education activity. The term co-instructor can be used interchangeably with co-leader for the purpose of this study.

CHAPTER II

LITERATURE REVIEW

The following review of related literature focuses on five major topics in an attempt to summarize the current body of knowledge pertaining to the topics of leadership, self-awareness and power. First, relevant literature on outdoor leadership is discussed. Second, general leadership literature is reviewed in relationship to the characteristic of self-awareness. Third, Kazimierz Dabrowski's "Theory of Emotional Development" and Abraham Maslow's theory on self-actualization is explained. The fourth area of review is the related literature on leader influence as defined by power. Fifth, the dynamics of co-leader relationships is reviewed. The final portion of this literature review consists of three sections addressing the three instruments used in this study: (1) The Definition Response Inventory (DRI); (2) Personal Orientation Inventory (POI); and, (3) The Rahim Leader Power Inventory (RLPI).

Outdoor Leadership

Professional outdoor educators have argued for years about the hierarchy of competencies found in quality leaders (Meier, Morash & Welton, 1987). Numerous individuals have identified basic outdoor leader competencies (Buell, 1983; Ewert & Johnson, 1983; Green, 1981; McAvoy, 1978; Priest, 1984; Swiderski, 1981). Cousineau (1977) was one of the first to identify principles for the development of an outdoor leadership certification. Using a Delphi technique, Cousineau surveyed 97 outdoor adventure leaders and identified a series of important principles for the formulation and implementation of a certification system. Outdoor leader competencies such as prior experience, technical skill competency, minimum age, physical fitness and aquatic life saving appeared as the most important components. Also included in the most

important list was an emphasis on desired personality traits. Yet, respondents shared concerns about the difficulty of assessing these subjective traits.

Cousineau recommended in his concluding statements that studies needed to be undertaken to determine the desirable personality traits.

In a study conducted by Buell (1981), 300 outdoor professionals ranked leadership competencies. The competency list developed by Buell (1983) includes twelve items: (1) evaluation; (2) outdoor skills; (3) human development; (4) safety; (5) program planning; (6) environmental ethics; (7) instructorship; (8) professionalism; (9) trends and issues; (10) philosophical foundations; (11) facilities and equipment; and, (12) administration. Although this work served as a significant contribution after Cousineau's work in identifying outdoor leader competencies, Buell chose not to include the more subjective attributes of personality. Buell (1983) briefly referred to a list of personal leadership qualities such as self-confidence, patience, tolerance, and initiative. He considered these as ideal goals for an outdoor leader to work toward but pursued the topic no further. Ewert and Johnson (1983) in a look at the outdoor leadership profession included leader personality as one of five primary competencies.

Galpin and McEwen (1987) surveyed adventure leaders and had them rank technical skills, interpersonal skills and philosophical understanding skills in order of importance. The category of interpersonal skills ranked as the highest while technical skills ranked the lowest. Interpersonal skills included on the survey were creative problem solving, evaluation and debriefing, outdoor teaching and average interpersonal skills. Galpin and McEwen admitted that interpersonal skills, although deemed very important, would remain the most subjective and difficult skills to evaluate.

Priest (1987b) moved deeper into the subjective realm of leadership attributes by identifying seven skills and seven attributes that form an effective leader. Among the seven attributes, Priest specifically listed three personality oriented attributes: (1) healthy self-concept and ego; (2) awareness and empathy for others; and, (3) personable traits and behavior. Priest referred to adventure leaders with healthy self-concepts as unselfish individuals who know their abilities and limitations. Awareness and empathy referred to a leader's ability to read the emotional status of group members so that personal goals may be reached. Priest listed important traits such as unselfishness, confidence, honesty, punctuality, humor and eagerness. Leaders must demonstrate concern, admiration and respect.

There is growing acceptance and emphasis that adventure leader competency goes far beyond technical skill competency (Phipps & Swiderski, 1990).

It is no longer acceptable to be solely technically competent in hard skills such as navigation, use of equipment, trip logistics, etc. Soft skill competences are also needed because many expeditions fail in meeting their goals and objectives simply because of group dynamics and leadership-related problems that are either not addressed, or are inappropriately handled by the usual methods and curriculums in outdoor leadership training. (p. 223)

Phipps and Swiderski's chapter on the *soft skills* of leadership addresses the affective side of leadership or sometimes referred to as the *people skills* of leadership. Based on prior research and personal experience Phipps and Swiderski provide an example list of outdoor leader soft skills broken down into three categories:

SOCIAL

- maintenance of intact group dynamics (Priest, 1987a, p. 5)
- resolution of conflict (Priest, 1987, p. 5)

- development and provision of a supportive group climate
- sensitivity to the needs of others; empathy (Priest, 1987a, p. 4)
- establishment of effective group relations
- recall of names
- provision of opportunity for personal growth (Priest, 1987a, p. 23)

PSYCHOLOGICAL

- creation of a climate of trust (Priest, 1987a, p. 5)
- understanding and stimulation of motivation
- management of psychological stress (Buell, 1981, p. 105)
- promotion of values and understanding of attitudes
- attunement of healthy self-concept and secure ego (Priest, 1987a, p. 4)
- team building
- assessment of mental and emotional strengths (Swiderski, 1981, p. 108)
- development of environmental ethics
- respect for the counseling/therapy difference (Buell, 1981, p. 4)

COMMUNICATION

- ability to think on one's feet
- ability to speak in front of groups
- interpretation [sic.] of nonverbal body language
- ability to listen and respond while conducting debriefing sessions
- persuasiveness
- ability to transfer information by teaching (Miles & Priest, 1990, p. 225)

Jordan (1996) frames affective leader attributes in a slightly different way based on a value system. Jordan identifies six primary values that effective and well-respected leaders exhibit in their work. First, an *achievement orientation* helps a leader see a task through from beginning to end. *An other orientation* is an unselfish way of being so that participant needs come before the leader's needs. *A willingness to take risks* helps a leader grow by trying new things. *A desire to create trustful relationships* results in a more enjoyable experience and makes goal accomplishment more feasible. Modeling *self-actualization* as a leader helps group members believe in themselves so that they maximize their growth potential. The final value discussed by Jordan is

self-esteem. Leaders who exhibit high self-esteem, a very positive self-perception, tend to be more respectful, trusting and will have integrity.

Paul Petzoldt, founder of the National Outdoor Leadership School (NOLS) and the Wilderness Education Association (WEA), is given credit for being one of the first to emphasize the importance of *soft skills* or the affective side of leadership based on his concept of expedition behavior (Phipps & Swiderski, 1990). Expedition behavior (Petzoldt, 1974) is an awareness of all relationships such as individual to individual, individual to group, group to individual, and group to other groups plus the motivation and character to be as concerned for others as for oneself. Drury and Bonney (1992) have created a text book of lesson plans based on Paul Petzoldt's work and the WEA curriculum (Cockrell, 1991) to be used as a resource for the training of outdoor leaders. Drury and Bonney believe an outdoor leader's awareness of self forms an essential leadership building block. The concept of outdoor leader self-awareness continues to capture more attention in the outdoor leadership literature as the understanding of this psychological construct grows. Other bodies of literature specifically address the prominence of leader self-awareness which may add significantly to the development of outdoor leadership.

Leadership and Self-awareness

Kouzes and Posner (1993) stated "that today's leaders should seek self-knowledge if they mean to establish and enhance their credibility" (p.58). Kouzes and Posner's research indicated that "to know genuinely the level of commitment a person is willing to make to become a credible leader, three aspects of the self must be discovered: (1) personal values or credo; (2) capabilities or competencies; and, (3) trust in personal abilities or confidence"

(p.59). Warren Bennis (1989) noted in a study of 29 leaders that self-knowledge was an essential part of defining a leader's integrity. Bennis found that to become a leader a person must know him/herself. Johnson and Johnson (1991) stated that leaders are in a "continuous process of increasing technical and interpersonal expertise. Individuals must make their own journey to actualize a vision and model the way for others" (p.178).

Steven Covey (1991), a renown author of management literature and leadership training, developed the popular Seven Habits of Highly Effective People. Covey identified what he believed to be unique human endowments associated with each habit. Three primary human endowments (1) self-awareness; (2) imagination and conscience; and, (3) volition or will power coincide with the first three habits and dictate the attainment of endowments found in the last four habits. Self-awareness constituted the human capability found in the first habit, *Be Proactive*. Covey defines self-awareness on a continuum from playing the victim role on one end while on the other, we find people who self-determine responses under any condition or conditioning. Low end continuum people shift responsibility and blame others and are controlled by external events. High end continuum people chose their responses in any situation and take responsibility.

James MacGregor Burns (1978), a political scientist, historian and social philosopher, addresses self-awareness through a larger construct called self-actualization in his book on leadership. Burns agrees with the humanistic psychologist that self-actualization includes the ability to self-assess in a state of reflexive self-awareness. Burns suggests that self-actualizers have a distinct capacity to learn from others and the environment. "Self-actualization ultimately means the ability to lead by being led. It is this kind of self-actualization that enables leaders to comprehend the needs of followers, to enter into their

perspectives, and to act on popular needs such as those for material help and for security and esteem" (p. 117). Burns emphatically states, "... one talent all leaders must possess---the capacity to perceive needs of followers in relationship to their own, to help followers move toward fuller self-realization and self-actualization along with the leaders themselves" (p. 116).

Goleman's (1995) research on emotional intelligence looks at the role that self-awareness plays in governing our affective existence. He claims that self-awareness is a crucial ability because it allows us to exercise some self-control. Goleman explains that psychologists use the term metacognition to define the awareness of thought process while metamood means awareness of one's emotions. Goleman prefers the term self-awareness as attention to one's internal states. He points out that psychoanalysts call it "observing ego" so that therapist reactions are monitored. "Self-awareness is not an attention that gets carried away by emotions, overreacting and amplifying what is perceived. Rather, it is a neutral mode that maintains self-reflectiveness even amidst turbulent emotions" (p. 47). Goleman cites psychologist, John Mayer, who finds that people tend to fall into distinctive styles of dealing with emotions. The *engulfed* type are those people who are swamped by their emotions and feel helpless and do not try to escape. The *accepting* type are often clear about how they feel and accept their moods and do not try to change them. The third is the self-aware type describe as:

Aware of their moods as they are having them, these people understandably have some sophistication about their emotional lives. Their clarity about emotions may undergird other personality traits: they are autonomous and sure of their own boundaries, are in good psychological health, and tend to have a positive outlook on life. When they get into a bad mood, they don't ruminate and obsess about it, and are able to get out of it sooner. In short, their mindfulness helps them manage their emotions. (p. 48)

In summary, Goleman provides a perspective of self-awareness tied directly to the emotional or affective sides of our beings based on his theory of emotional intelligence. Burns incorporates self-awareness into another psychological construct called self-actualization as a necessary leadership characteristic. Johnson and Johnson, Kouzes and Posner, Covey and Bennis all believe that self-awareness plays an important role in effective leadership. Yet, what lacks in all the above cited works is a psychological model that embraces the rich, broad concepts found under the definitions of leader self-awareness. The theory discussed in the following section provides a home for the characteristic of self-awareness within the context of human development theory.

Dabrowski's Theory of Emotional Development

Kazimierz Dabrowski (1902-1980), a Polish psychiatrist and psychologist who survived both world wars, developed the "Theory of Positive Disintegration" which embodies the concept of self-awareness. Dabrowski was imprisoned by the Nazis and witnessed the unspeakable atrocities during those times. "His theory grew out of his own confrontation with death, suffering, injustice and his desire to understand the meaning of human existence" (Silverman, 1993, p. 11). Dabrowski developed his "Theory of Positive Disintegration" where he proposed that existing psychological structures must break down before higher levels of advanced development can form (Dabrowski, 1967). Dabrowski desired to educate the psychological profession with the notion that inner conflict should be seen as developmental rather than degenerative. Linda Silverman explains that Dabrowski's "Theory of Positive Disintegration" was renamed as the "Theory of Emotional Development" after his death in order to emphasize the role of emotions in human development (Hague, 1988).

Piechowski (1979) described the thesis of Dabrowski's theory as, "the capacity for emotional feeling that empowers and guides an individual to develop toward a higher level, because it is passion that makes us capable of empathy, understanding, caring, and finding that which gives our lives direction" (p. 139). Dabrowski and Piechowski (1977) in their book, Theory of Levels of Emotional Development, outlined five levels of emotional development. Dabrowski frames this as the development of personality which is stratified into five levels (Table 1). Piechowski (1979) explains, "the process of change from a lower to a higher level is seen as a process of emotional development. And one of the principal functions of being emotional is the capacity for self-observations, self-reflection, self-judgment" (p.137). Dabrowski and Piechowski (1977) attempted to give a systematic account of the phenomena called self-awakening or of the awakened consciousness. For example in Level I, an individual's main concern is ego protection to the point of extreme selfishness. In Level II of emotional development, the individual struggles to find a sense of self. Levels III and IV show movement towards self-actualization which result in emotions of compassion and empathy. Level IV is the attainment of self-actualization as defined by Abraham Maslow. Level V marks the attainment of the self-actualized personality ideal. Theoretically, only a small group of people ever reach level V of emotional development. Dabrowski's theory should not be confused with other stage theories where higher stages grow sequentially out of lower stages. In Dabrowski's theory:

Levels develop independent of, and in conflict with, each other. The desire for group approval at Level II does not evolve from the self-centered orientation of Level I. The levels may co-exist in the personality, and as the less evolved structure disintegrates, the more evolved structure gains in strength. This has an important bearing on the interpretation of inconsistencies in behavior. (Silverman's critique: Hague, 1988, p. 61)

Table 1

Dabrowski's Theory of Emotional Development and the Five Levels of
Emotional Development

Level I: Primary Integration

At level I, Primary Integration, egocentrism prevails. A person at this level lacks the capacity for empathy and self-examination. When things go wrong, someone else is always to blame; self-responsibility is not a Level I characteristic. With nothing within to inhibit personal ambition, individuals at Level I often attain power in society by ruthless means.

Level II: Unilevel Disintegration

At Level II, individuals are influenced primarily by their social group and by mainstream values, or they are moral relativists for whom "anything goes," morally speaking. They often exhibit ambivalent feelings and indecisive behavior because they have no clear cut set of self-determined internal values. At Level II, inner conflict is horizontal, a competition between equal, competing values.

Level III: Spontaneous Multilevel Disintegration

At Level III, multilevelness arises. The person develops a hierarchical sense of values. Inner conflict is vertical, a struggle to bring one's behavior up to higher standards. There is a dissatisfaction with what one is, because of a competing sense of what one could and ought to be (personality ideal). This internal struggle between higher and lower can be accompanied by existential despair, anxiety, depression, and feelings of dissatisfaction with the self (inferiority, disquietude, astonishment).

Level IV: Organized Multilevel Disintegration

In comparison to those at Level III (the level of emotional tumult), individuals at Level IV are well on the road to self-actualization. They have found a way to reach their own ideals, and they are effective leaders in society. They show high levels of responsibility, authenticity, reflective judgment, empathy for others, autonomy of thought and action, self-awareness, and other attributes associated with self-actualization.

Level V: Secondary Integration

At level V the struggle for self-mastery has been won. Inner conflicts regarding the self have been resolved through actualization of the personality ideal. Disintegration has been transcended by the integration on one's values and ideals into one's living and being. The life is lived in service to humanity. It is lived according to the highest, most universal principles of loving, compassionate regard for the worth of human individual.

(Silverman, 1993, p. 18)

Dabrowski's theory can also be viewed as one of developmental potential or a quest for higher levels of development. Dabrowski (1964) believed that humans possessed a drive for self-perfection, yet not everyone was born with the drive. He believed that the drive evolved as the individual progressed to higher levels of development. Dabrowski uneasily accepted the notion that the pursuit for self-perfection was a result of only heredity and environment. Dabrowski created the "third factor" which is described as an inner force operating in the service of self-actualization. The third factor is an internal force that transcends the limitations of both heredity and environment through self-determination (Silverman, 1983). Weckowicz (1988) further interprets Dabrowski's view by explaining that self-actualization at lower levels of development is determined by the inherited endowment, the growth potential and the social milieu. At higher levels of development, the individual shapes his or her own development by intentional acts and free choices made possible by the "third factor".

In order to assess the developmental level of an individual, the concept of dynamisms are presented by Dabrowski and Piechowski (1977). Dabrowski and Piechowski define dynamisms as, "intra-psychic dispositional traits which shape development" (p.37). Kawczak, cited in Dabrowski and Piechowski, described dynamisms as, "psychological compounds which unite intellectual and intuitive insights with affective involvement and commitment" (p. 37). Dynamisms can be seen as the forces which distinguish the five developmental levels. Therefore, each level of development reflects a distinct personality structure accompanied by a specific behavioral organization (Table 2). The presence or absence of the constellation of dynamisms which characterize each level offers a way to identify an individual's developmental level.

Table 2

Dynamisms

I	Creative Instinct Empathy Identification Inner Conflict External Conflict Temperamental Syntony Directing and Disposing Center
II	Second Factor Ambivalences Ambitendencies
III	Positive Maladjustment Feelings of Guilt Feelings of Shame Astonishment with Oneself Disquietude with Oneself Inferiority Toward Oneself Dissatisfaction with Oneself Heirarchization
IV	Autopsychotherapy Self-Control Self-Awareness Inner Psychic Transformation Third Factor Subject-Object in Oneself
V	Personality Ideal Autonomy Authentism Responsibility Education-of-Oneself

(Dabrowski & Piechowski, 1977, p. 38)

Level I is considered the developmental dynamics of external conflict and temperamental syntony (superficial group feeling). The main disposing and directing center (DDC) is described as "main primitive drive" and represents forces such as ambition, craving for power, money, security, etc. (Dabrowski & Piechowski, 1977). The DDC, used as a descriptive term, operates as a guide for behavior and expression at each developmental level.

Level II dynamics are ambivalences, ambitendencies, second factor (external environment), external conflict, internal conflict, temperamental syntony, identification, and creative instinct. Level II is seen as conflicting fluctuations of actions and feelings. The DDC operating at this stage sees external forces competing for dominance.

Level III includes emotional conflicts such as feelings of shame, guilt, disquietude with oneself, inferiority toward self and dissatisfaction with self. Cognitive conflicts also occur such as astonishment with oneself and positive maladjustment. Hierarchization, identification, empathy, inner conflicts, and external conflict all represent multidimensional conflicts. The DDC (ascending and descending) represents conflict between higher and lower level motivations which control psychological processing and behavioral functioning.

Level IV is where the third factor comes into play of conscious choice and decision in regard to self-development. Subject-object in oneself, inner psychic transformation, self-awareness, self-control, autopsychotherapy, self-education, creative instinct, self-perfection, identification, empathy and inner conflict are all dynamics represented at this level. The DDC (unified) reflects the inner psychic milieu as the most distinct component. Dabrowski and Piechowski describe the inner psychic milieu (internal environment) is analogous to the external environment in which man lives.

Before the final secondary integration can occur, several dynamisms are necessary between levels IV and V: responsibility (towards the personality), authenticity, autonomy, personality ideal, empathy, self, and an absence of inner conflict. The DDC is now unified with the developmental direction identified with the personality ideal. At Level V the personality ideal becomes the only dynamism recognizable. Secondary integration is complete; therefore, the personality ideal is the main source of inner life and outwardly expressed behavior.

A discussion of Dabrowski's theory would not be complete without an introduction to his concept of developmental potential and forms of overexcitability (OE). "Developmental potential is the underlying principle that provides continuity between the levels" (Nelson, 1989, p. 5). "Dabrowski's concept of development potential includes talents, special abilities, and intelligence, plus five primary components: psychomotor, sensual, intellectual, imaginal, and emotional" (Piechowski, 1991, p. 287). The five forms of (OE), psychomotor, sensual, imaginal, intellectual and emotional, and their derivatives in combination with the developmental dynamisms explain the different levels of development.

Overexcitabilities contribute to a person's psychological development by playing a role in the development of dynamisms. A richer, broader, multilevel, and multidimensional perception of reality exists when OE's are enhanced. OE's are measured within a person as observable traits, to determine the developmental potential of attaining higher levels. Dabrowski believes that the overexcitabilities work in combination with societal influences and innate, individual mental functions to explain his view of personality development.

Maslow's Self-Actualization

Maslow's (1968, 1970, 1971) description of self-actualizing individuals fits into level IV of emotional development which is the level of moral autonomy, self-directed growth and empathy (Dabrowski & Piechowski, 1977, Piechowski, 1978). "Maslow has developed the idea of the self-actualizing person - a person who is more fully functioning and lives a more enriched life than does the average person" (Shostrom, 1964, p. 207). Maslow describes self-actualizers as highly creative individuals who have the ability to transcend culture and practice universal values (Ayers, 1994).

Maslow's basic assumption is that people strive to be exceptional rather than normal. The extent to which the striving is satisfied dictates what is considered to be self-actualized. Maslow (1970) describes the self-actualized as having a genuine desire to help the human race. People behave with less self-consciousness, accept themselves, have closer interpersonal relationships, show less ego involvement and act in a kinder manner. Maslow says self-actualizers are individuals who tend to exercise democratic values in all relationships. Self-actualizers behave naturally and simply with a lack of artificiality or straining effect. These individuals tend to value solitude and privacy more than the average person. The following is a list of self-actualization characteristics taken from Maslow's (1970) work:

1. More efficient perception of reality
2. Acceptance (self, others, nature)
3. Spontaneity; simplicity; naturalness
4. Problem centeredness rather than ego centeredness
5. The quality of detachment; the need for privacy
6. Autonomy; independence of culture and environment; will; active agents
7. Continued freshness of appreciation

8. Mystical and peak experiences
 9. Deep sense of identification, sympathy and affection for humanity
(Gemeinschaftsgefühl)
 10. Deeper and more profound interpersonal relations
 11. Democratic character structure
 12. Discrimination between means and ends, between good and evil
 13. Philosophical, unhostile sense of humor
 14. Creativeness
 15. Resistance to enculturation; transcendence of any particular culture
- (Maslow, 1970, pp. 153-172).

Maslow makes clear that self-actualizing people are not perfect and do demonstrate imperfections. Maslow's subjects were observed with silly, wasteful, or thoughtless habits. His subjects were occasionally capable of extraordinary and unexpected ruthlessness. "This makes it possible for them to display a surgical coldness when this is called for, beyond the power of the average man" (p. 175). Self-actualizers can be so caught up in thought and concentration on a particular phenomenon or question, they become absent minded, impersonal, humorless and forget ordinary social politeness. They come across as non-caring and their behavior may be interpreted as insulting or hurtful. Self-actualizers fall prey to guilt, anxiety, sadness, self-castigation, internal strife and conflict. As a consequence, they may be viewed as unhealthy for displaying these neurotic tendencies.

Maslow (1970, 1971) takes his findings further and distinguishes between nontranscending self-actualizers and transcending self-actualizers. While all self-actualizers proved exceptional, the transcending self-actualizers were more so. Transcending self-actualizers or "peakers" value their peak experiences. Peak experiences are defined as operating at optimal capacity. Transcending

self-actualizers transcend their own egos and become more global or holistic in their thinking. Transcenders tend to be more responsive to beauty and love and do not mind discussing their peak experiences. Piechowski's (1978) case study of Antoine de Saint-Exupery, author of The Little Prince, identifies and describes a transcending self-actualizer. Eleanor Roosevelt serves as an example of a nontranscending self-actualizer (Piechowski & Tyska, 1982, Piechowski, 1990). Nontranscenders also known as "nonpeakers" or "doers" do not require peak experiences for personal growth.

Other self-actualizers have been documented in the literature. Etty Hillesum, a Jewish Dutchwoman who diared her spiritual growth and died in a German concentration camp, attained development at level IV (Piechowski, 1992; Spaltro, 1991). A theoretical framework does exist that shows personal growth leading to self-actualization (Brennan & Piechowski, 1991). Brennan and Piechowski administered the Definition Response Inventory (DRI) to 21 subjects to assess developmental levels. Four subjects were interviewed with structured questions to determine how they achieved their current level of emotional functioning.

We found that our self-actualizing individuals share a number of characteristics in common. They have intensity, energy, and the persistence to work toward high ideals and a capacity to inspire others toward similar ideals. In their life histories, they share childhood giftedness, emotionally difficult and disruptive life experiences, and intense life-affirming experiences. (p. 44)

Combining Dabrowski's and Maslow's theories formulates a substantial conception of leader self-awareness based on emotional development and the characteristics of self-actualizing individuals as outlined by Maslow. Piechowski (1990) using Eleanor Roosevelt, as an example of a self-actualizer at level IV, describes the importance of self-knowledge as the key ingredient for understanding others. Maslow found that self-actualizers attract admirers and

inspire those around them. The influence of self-actualizers that Maslow speaks of could potentially play a significant role in our understanding of leadership.

Power Theory

To link the influence that leader self-awareness has during the leadership role may be found within the concept of power. Knoop (1992) claims that, "knowledge of one's qualities, character, abilities and effects is a prerequisite for using power effectively. Self-knowledge can shape personality, form character, instill confidence and develop inner strengths" (p. 15). Power can be defined as an influence or exchange relation which is operationalized by observing the behavior of two or more interacting persons (Stogdill, 1974). Rahim (1988) defines power as the ability of one party to change or control the behavior, attitudes, opinions, objectives, needs, and values of another party. French and Raven's (1959) five types of power receives much attention as a way of identifying power. French and Raven's five types of classic power are as follows:

1. *Reward Power* is the ability to give rewards.
2. *Coercive Power* is the ability to punish or threaten punishment.
3. *Legitimate Power* is based on the position one holds or is given.
4. *Referent Power* is when a person is liked or admired (charisma).
5. *Expert Power* is based on an individual's knowledge and skills.

Jordan (1996) in her writings on recreation leadership identified five additional types of power: connection/networking, empowerment, helplessness, informational and social status. In addition to Jordan's writing, others have attempted to expand French and Raven's work. But, Gaski (1986) argues that

other types of identifiable power, such as informational power, are captured within French and Raven's work.

Researchers who have developed instruments to measure French and Raven's five types of power include Rahim (1988), Student (1968) and Bachman, Smith, and Slesinger (1966). These instruments were all designed to assess a subordinate's perception of a supervisor's or manager's level of power. Empirical evidence suggests that the power bases can be classified into two categories, position and personal (Rahim, 1988). Position power bases include coercive, reward, and legitimate power. Expert and referent are considered to be personal power bases.

Warren (1968) in a study of the five types of power using school principals and teachers found referent power to correlate the highest to teacher conformity. Rahim (1988) surveyed 2,000 executives and found that expert and referent power were positively associated with compliance and job satisfaction. Legitimate power was positively associated with compliance but negatively associated with satisfaction. Rahim concluded that managers could be more effective in increasing subordinate compliance and satisfaction by enhancing their expert and referent power bases. Rahim and Afza (1993) sampled 308 American accountants and found that expert and referent power were positively correlated with work satisfaction. Expert and referent power bases were also positively correlated with attitudinal compliance, while legitimate and referent power correlated positively with behavioral compliance.

Rahim and Buntzman (1989) conducted a study to understand the relationship between the five power bases and handling conflict. The authors were particularly interested in investigating supervisor's styles of handling interpersonal conflict with subordinates based on the supervisor's power bases. A sample of 301 American business administration students with one year of

work experience were surveyed. Legitimate power correlated positively with a dominating style of conflict. Expert power was positively correlated with integrating and dominating styles but negatively correlated with avoiding conflict style. Referent power correlated positively with integrating, obliging, and compromising styles but correlated negatively with dominating style. Also in this study, referent power was positively correlated with satisfaction of the supervisor.

An important factor not discussed in the power bases literature relates to the cultural bias of the results. "The theory of leader power, as developed in the U.S., generally indicates that expert and legitimate power bases are associated with job performance, and referent power base is generally associated with organizational commitment and other affective responses" (Rahim, Khan & Uddin, 1994, p. 332). Utilizing the French and Raven five bases of power, these authors, surveyed subordinates and supervisors in a developing country. Participants consisted of 250 superior-subordinate dyads from three banks in Bangladesh. Results showed in Bangladesh that legitimate and expert power bases were associated with commitment, whereas in the U.S. referent power is associated with commitment. Also in Bangladesh, coercive and expert power were associated with effectiveness. This study shows that expert power base is positively associated with commitment and effectiveness in collectivistic cultures. "Findings of this study indicate that in both individualistic and collectivistic cultures, supervisors can depend on expert power for enhancing their subordinates' commitment and effectiveness" (p.338).

Student (1968) conceptualized referent and expert power to be qualitatively different from reward, coercive and legitimate power. The reward, coercive and legitimate power of supervisors were primarily controlled by the organization. Referent and expert power were found to be idiosyncratic in character and

based on a supervisor's own behaviors and interactions with subordinates. Referent and expert power serve as a connection point to leader self-awareness.

Managers with referent powers make meaning for others and give them a sense of purpose. They are able to generate trust, openness and respect by using these same qualities in their interactions with others. However, inspiring loyalty and trust based on personal integrity and honesty is a slow and often unconscious process. This process has more to do with self-development. (Knoop, 1992, p. 17)

Knoop also explains that when a follower likes a leader that an emotional attraction can develop called charisma. Charisma constitutes a special power that inspires enthusiasm and devotion among followers.

Knoop believes that expert power is based on dependency. The more others depend on the leader for task-relevant expertise, the more power the leader can exercise. "For gained experience to become effective it is important to demonstrate it in problem-solving, task performance and logical argument, without fear of loss of dependency" (p. 16). Not fearing a loss of follower dependency incorporates a leader's ability to let go and operate in a state of selflessness. A leader's level of self-awareness would dictate his or her ability to let go so that a lack of follower dependency is not an issue.

Co-Leader Relationships

Thus far, the leadership discussions throughout the literature reviewed for this study places leadership in the context of one individual exerting influence over others. The research on power has only looked at a subordinate's perception of a single individual operating as a supervisor. In reality, a significant number of adventure experiences are led by more than one designated leader. A profound deficit exists in the outdoor adventure literature

which addresses the dynamics of co-leadership. Empirical exploration of the co-leader relationship has received minimal attention by researchers in most disciplines. Psychological literature does contain some information on the co-therapist relationship (MacLennan, 1965; McGee & Schuman, 1970; Mintz, 1963; Winter, 1976) . Educational researchers do analyze the team teaching approach used by teachers (Arikado, 1975; Gately & Gately, 1993; Molnar, 1972; Rosaen & Lindquist, 1992). Theory supports that the co-leader relationship directly influences group development and goal attainment (Winter, 1976)

Winter authored an insightful article based on her experience as co-leader, observer, or supervisor for nine co-led college self-analytic study groups. She also included experience from co-taught college classes, group therapy and a dozen co-led weekend encounter groups. Leader pairs represented a variety of matches including, same sex pairs, opposite sex pairs, equal status pairs and unequal status pairs. Winter discussed co-leader relationships and roles within the context of group development proposed by Mills (1964). The four group phases and corresponding concerns include: (1) Encounter, when group concerns include fear, safety, uncertainty and acceptance; (2) Differentiation, Conflict, and Norm Building, when group concerns include accommodating individual differences and intermember struggles; (3) Production, when group concerns include focus on task and norm/role establishment; and, (4) Separation, when group concerns include making sense of experience, re-emergence of solidarity and death of group.

Winters (1976) presents a model (Table 3) where she identifies corresponding member feelings, co-leader roles and co-leader concerns with each phase of group development. Winters explains the relationship between the group and co-leaders through the four columns of the model. The following

Table 3
Stages in Co-leader Roles and Concerns

Phase	(a) Group Members' General Concerns	(b) Members' Feelings Toward Co-Leaders	(c) Tendencies in Co-Leader Roles in Group	(d) Co-Leaders' Backstage Concerns
I Encounter	<ul style="list-style-type: none"> - initial uncertainty, fear - concerns with safety, acceptance, inclusion, solidarity 	<ul style="list-style-type: none"> - dependency on, idealization of leaders - group wants leaders in harmony - group wants clear plan 	<ul style="list-style-type: none"> - unity, "unity front" - uniformity of role - close monitoring of each others' actions, reactions 	<ul style="list-style-type: none"> - desire to agree; stress on similarity - desire for mutual support - establishment of policies to promote unity and uniformity
II Differentiation, Conflict, Norm-building	<ul style="list-style-type: none"> - concerns with accommodating individual differences in differentiated roles - intermember leadership struggles 	<ul style="list-style-type: none"> - resentment of leaders and leader solidarity - differentiation of leaders along stereotyped lines (good-bad, strong-weak, etc.) - attempts to divide and conquer leaders 	<ul style="list-style-type: none"> - beginning emergence of differences, along stereotyped lines - more or less visible strain and conflict 	<ul style="list-style-type: none"> - disagreement, competition, power conflicts, criticism, envy, etc. - development of methods to deal with these issues and feelings
III Production	<ul style="list-style-type: none"> - group norms and roles well established - focus on task 	<ul style="list-style-type: none"> - group looks to leaders for realistic help, direction on group task 	<ul style="list-style-type: none"> - particularized role differentiation, based on the two individuals' real strengths and weaknesses - interaction more spontaneous 	<ul style="list-style-type: none"> - respect for, acceptance of differences - co-leader relationship seems less important than group task
IV Separation	<ul style="list-style-type: none"> - concern with making sense of what happened - re-emergence of solidarity concerns, to ward off death of group 	<ul style="list-style-type: none"> - members more dependent again - group wants interpretation of what happened; reassurance regarding meaningfulness of group - exploration of whether relationships with co-leaders might continue after group ends 	<ul style="list-style-type: none"> - roles in group more uniform again - roles with members outside the group may diverge 	<ul style="list-style-type: none"> - mutual support as group dies - concern about meaning and value of the group and co-leading experience - separation from group and each other

(Sara K. Winter, 1976, pp. 350-351)

citation from Winter, using specific issues, demonstrates how co-leader behavior affects group behavior.

Since the co-leader dyad is a group in its own right, changing over time, there is a general parallel in each period between the co-leaders' internal preoccupations in the last column, and the concerns of members within the group at large (column a). This is only one of the ways in which the group and the co-leaders are interrelated, and affect one another, at any point in time. As a special case of the familiar phenomenon that groups mirror the leaders' preoccupations, groups become blocked at the exact points where co-leaders have problems with each other. When two leaders are unable to face and accept competitiveness in their relationship, for example members inevitably experience parallel problems with competitiveness among themselves even if the interleader tension is carefully suppressed. Sexual tensions which the co-leaders have not faced in their own relationship will give rise to collective inability to deal with sexuality in the group. A special difficulty is that the communication block between the co-leaders is itself reflected in the group, so that the issue becomes unusually hard to resolve. (p. 353)

Winter summarizes her beliefs by explaining that "the task of the co-leaders in each phase of group life is to solve as a two-person group the particular problem being simultaneously confronted by the group as a whole -- while demonstrating to the group that the deepest fear of the particular phase is not justified" (p. 361).

McGee and Schuman (1970) discussed the nature of the co-therapy relationship. The co-therapy relationship, as with many relationships, experiences a developmental process of formation, development and stability. McGee and Schuman believed that the strength and stability of the co-therapy relationship is based on an ability to resolve stress or conflict effectively. Competitiveness and conflict can be expected, therefore a mutually supportive relationship must be emphasized. A group member has the ability to tip the co-therapist relationship by approaching only one therapist with a special request in an attempt to separate the co-leaders. "There is strongly suggestive

evidence that a group's operation and effectiveness are directly related to the quality and vicissitudes of the co-therapists' relationship" (p. 30). McGee and Schuman suggested that unresolved co-therapist issues will inevitably damage group psychotherapy.

Schwarz (1994) contended that "the co-facilitators' effectiveness depends on their openness with each other about issues that may affect their working relationship" (p 228). An example might be that the co-facilitator relationship is more competitive than supportive due to the influence of personal issues. For example, if both facilitators have a high need for approval, they may compete for facilitative time at the group's expense. Schwarz believes that co-facilitators must critique the source of their feelings so that they do not become victims of the group dynamics. In addition to personal issues as the source of emotions, there are times when co-facilitator feelings stem from parallel issues surfacing from within the group (Alderfer, 1990). Eliminating tension from the co-facilitator relationship poses a challenging task. Some tension always exists in a collaborative relationship because each person must yield a portion of his or her identity.

Instrumentation

The following three sections are devoted to the background, development and psychometric properties of the three instruments used in this study. First the Definition Response Inventory (DRI) used to assess levels of development according to Dabrowski's theory is discussed. Primary sources for this section come from Gage, Morse and Piechowski (1981), Miller and Silverman, (1987) and from Dr. Nancy Miller's (1991) second edition of the DRI coding manual.

Second, The Personal Orientation Inventory (POI) used to assess Maslow's concept of self-actualization is discussed. Much of the POI discussion comes

from the POI Handbook (Knapp, 1990) and the POI Manual (Shostrom, 1974). Finally, The Rahim Leader Power Inventory is reviewed based on the work of Rahim (1988).

Definition Response Inventory (DRI)

To measure levels of emotional development, Gage, Morse, and Piechowski (1987) developed the DRI. Dabrowski's Theory of Emotional Development postulates that the presence of dynamisms, or their manifest absence, provides the clue to developmental level. The theory also postulates that characteristic constellations of dynamisms appear only at certain developmental levels (Dabrowski & Piechowski, 1977). In developing the DRI, Gage defined six themes of the 30 dynamisms described by Dabrowski and Piechowski. The DRI consists of six descriptive statements (Appendix A) designed to focus respondents' attention to the six themes: (a) susceptibility to the influence of others; (b) internal conflict; (c) inferiority; (d) dissatisfaction; (e) self-observation; and, (f) personality ideal.

Respondents are asked to describe personal experiences which relate to each statement. Responses are content analyzed to assess developmental level. Raters analyze each response with regard to expression rather than the presence or absence of dynamisms. The expression of themes offers greater assurance that subjects will provide enough responses to make statistical analysis possible, especially at lower levels of development (Gage et al., 1981).

The initial validation research for the DRI was conducted with eight college seniors enrolled in an introductory clinical psychology course. The subjects completed the DRI and four other instruments: an autobiography; a situation-choice method; a situation-reason method; and an objective questionnaire (Gage et al., 1981). Construct validity was determined by utilizing the

convergent - discriminant methodology of Campell and Fiske (1959). The results showed that the objective questionnaire was the only instrument that was not measuring the same thing. All four instruments accurately discriminated among levels. Internal consistency of the DRI items has been found to be .71 (Miller, 1985). Interrater reliability has been reported by researchers ranging from .67 (Beach, 1980) to .77 (Lysy, 1979) using the Pearson's r .

Miller and Silverman (1987) described a new coding system for the DRI which was found to be more systematic, objective and reliable than the previous coding system. The new coding system is based on motivation as the classification principle. "Motives are the conceptions, attitudes, values, and feelings we hold toward the world and ourselves; they function to arouse, maintain, and channel behavior. At each developmental level, one's motivation is entirely different" (Miller, 1991, p.1). The Miller Assessment Coding System (MACS) utilizes three major categories: (1) feelings towards values; (2) feelings toward self; and, (3) feelings towards others. Within these three categories, there are five subcategories that correspond with each developmental level. See Appendix B for an example of the categories and subcategories. Raters analyze each of the six responses separately and assign one of the three major categories and one of five subcategories to each response.

A total of 269 questionnaires from eight previous studies were sampled using the MACS system. Interrater reliability was completed using Krippendorff's alpha which measures actual agreement and corrects for agreement by chance (Miller & Silverman, 1987). The average reliability across ten coders was .72. "The new coding system excelled in providing additional information about personality characteristics at various levels and in ease of coding" (p. 225).

Personal Orientation Inventory (POI)

In conjunction with the DRI, the POI developed by Everett Shostrom (1963, 1964) is used to assess self-awareness as a component of self-actualization. "The POI was developed to measure values and behaviors considered by therapists to be important in the development of self-actualization" (Raanan, 1973, p. 447). Shostrom (1964) perceived need for a measure that would provide therapists with an estimate of a client's level of positive mental health. Initial development of the item pool was based on observed value-judgment problems seen in private practices by therapists (Knapp, 1990). Shostrom used extant theory for the delineation of the initial scale constructs, deriving scoring categories from theoretical formulations associated with Maslow's (1954, 1962) concept of self-actualization; Riesman, Glazer and Denny's (1950) system of inner and other directedness; May, Angel, and Ellenberger's (1958); Perls, Hefferline, and Goodman's (1951) concepts of time orientation; and Bach and Goldberg's (1974) theories of acceptance of aggression. Shostrom (1964) also based his work on others such as Rogers, Fromm, Horney, Watts, Brammer and Shostrom and Ellis. "Items in the Personal Orientation Inventory were designed to reflect value orientations that are commonly held and that are considered to be significant to a person's approach to living" (Knapp, 1990, p. 4).

Items are scored on two scales, Inner-Directed Support and Time Competence, used to measure two major areas; (1) personal and interpersonal development, and (2) time orientation and support orientation. These concepts are considered clinically interpretable in relative or proportional terms and can be reported as ratio scores (Knapp, 1990). Ten subscales were also designed to reflect a particular facet important in the development of self-actualizing. The following symbols and descriptions were taken from the POI Manual (Shostrom,

1974, p. 5) are provided as a brief overview of the primary scales and subscales:

Ratio Scores - (Time competence (Tc) and Inner-directed (I) scales)

Time Ratio: Time incompetence/Time competence (Ti/Tc) -- measures the degree to which one is "present"

Support Ratio: Other/Inner (O/I) -- measures whether reactivity orientation is basically toward others or self

Profile Scores (POI Subscales)

(SAV) Self-actualizing value -- measures affirmation of primary values of self-actualizing persons

(Ex) Existentiality -- measures ability to situationally or existentially react without rigid adherence to principles

(Fr) Feeling reactivity -- measures sensitivity of responsiveness to one's own needs and feelings

(S) Spontaneity -- measures freedom to react spontaneously or to be oneself

(Sr) Self-regard -- measures affirmation of self because of worth or strength

(Sa) Self acceptance -- measures affirmation of self in spite of weaknesses or deficiencies

(Nc) Nature of man -- measures degree of the constructive view of the nature of man, masculinity, femininity

(Sy) Synergy -- measures ability to be synergistic, to transcend dichotomies

(A) Acceptance of aggression -- measures ability to accept one's natural aggressiveness as opposed to defensiveness, denial, and repression of aggression

- (C) Capacity for intimate contact -- measures ability to develop meaningful intimate relationships with other human beings, unencumbered by expectations and obligations

In order to provide a more in-depth conceptual framework for understanding the scale scores, the following detailed descriptions are provided in the POI Manual (Shostrom, 1990, pp. 13-18):

Time Ratio: The self-actualizing (S-a) person is primarily time competent and, thus, appears to live more fully in the here-and-now. Such a person is able to tie the past and the future to the present in meaningful continuity; appears to be less burdened by guilts, regrets, and resentments from the past than is the non-self-actualizing person. Aspirations are tied meaningfully to present working goals. The self-actualizing individuals past and future orientations are depicted as reflecting positive mental health to the extent that the past is used for reflective thought and the future is tied to present goals. Use of time in a competent way is expressed in a Time Ratio score of approximately 1:8. A S-a person might be thought of as being "incompetent" in use of a comparatively small portion of time. With a ratio of 1:8 such persons may be thought of as being time incompetent one hour for every eight hours that they are time competent. A non-self-actualizing person is comparatively incompetent most of the time and might score a ratio of 1:3.

Non-self-actualizing persons do not discriminate well between past or future. This person may be excessively concerned with either the past or future. A past-oriented person may be characterized as guilty, regretful, remorseful, blaming and resentful. This is the person haunted by undigested memories. The future-oriented person lives with idealized goals, plan, expectations, predictions and fears. This person obsesses over the future. A person who is present-oriented does not contribute to the present in a meaningful way and

has no future goals tied to present activity. These are often unreflective busy people who actively avoid facing themselves.

Test items were empirically chosen from observed value judgments of clinically healthy and troubled patients (Shostrom, 1964).

Support Ratio: The support orientation of S-a persons tend to lie between that of the extreme other and the extreme inner-directed person. The inner-directed person goes through life apparently independent, but still obeying the internal piloting system which is influenced by parents and other authority figures. The source of direction for the individual is inner in the sense that internal motivations are the guiding force rather than external influences.

The other-directed person appears to have been motivated to develop a radar system far wider than parents. The primary control feeling tends to be fear or anxiety of fluctuating voices of school authorities and peers for example. There is a danger that the other-directed person will be over-sensitive to others opinions in matters of external conformity. Manipulation in the form of pleasing others and insuring constant acceptance, becomes the primary method of relating. The feeling of fear can be transformed into an obsessive, insatiable need for affection or reassurance of being loved.

The S-a person has a support ratio of approximately 1:3 (other:inner) while the non-self-actualizing person ratio is approximately 1:1. Research indicates a moderate correlation of .49 between time ratio and support ratio. This suggests that S-a persons live primarily in the present and also rely more on their own self-support and self-expressiveness than do persons who live predominantly in the past or in the future.

(SAV) Self-actualizing values: Derived from Maslow's concept of self-actualization, a high score on this scale suggests that the person holds and lives by values of S-a people. Conversely, a low score suggests rejection of

such values. Items in this scale cut across many characteristics, but a representative SAV item is: "I live in terms of my wants, likes, dislikes, and values."

(Ex) Existentiality: A high score reflects flexibility in the application of SA values or principles to one's life and the ability to use good judgment in applying these general principles. Low scores tend to reflect values held so rigidly that they become dogmatic or compulsive.

(Fr) Feeling reactivity: A high score measures sensitivity, a low score insensitivity, to one's own needs and feelings.

(S) Spontaneity: The ability to express feelings in spontaneous action is measured by high S score. A low scorer is one fearful of expressing feelings behaviorally.

(Sr) Self-regard: A high score measures the ability to like one's self because of one's strength as a person. A low score indicates self worth.

(Sa) Self-acceptance: Acceptance of one's self in spite of one's weaknesses or deficiencies is indicated by a high Sa score; inability to accept one's weaknesses is suggested by a low score. It is more difficult to achieve self-acceptance than self-regard. Self-actualizing requires both.

(Nc) Nature of Man, Constructive: A high score measures self actualizing ability to be synergic in understanding human nature (man is seen as essentially good). Low score means that one sees man as essentially evil or bad and is not synergistic.

(Sy) Synergy: A high score is measure of the ability to see opposites of life as meaningfully related. A low score means that one sees opposites of life as antagonistic. When one is synergistic one sees that work and play are not different, that lust and love, selfishness and unselfishness, and other dichotomies are not really opposites at all.

(A) Acceptance of aggression: The ability to accept anger or aggression within one's self as natural is measured by a high score; that one denies having such feelings is measured by a low score.

(C) Capacity for intimate contact: A high score measures the person's ability to develop meaningful, contactful, relationships with other human beings. A low score means one has difficulty with warm inter-personal relationships. Making contact may be defined as the ability to develop and maintain an "I-Thou" relationship in the here-and-now and the ability to meaningfully touch another person.

Interpretation of the ten subscales is facilitated by pairing them into five groups of complementary scales. The Self-actualizing value (SAV) and Existentiality (Ex) interpretations reflect the general area of valuing. Feeling reactivity (Fr) and Spontaneity (S) interpretations reflect the general area of feeling. Self-regard (Sr) and Self acceptance (Sa) interpretations reflect the area of self-perception. Nature of man (Nc) and Synergy (Sy) reflect the general area of awareness. Acceptance of aggression (A) and capacity for intimate contact (C) are expressions of good interpersonal contacts and both may be considered to reflect the general area of interpersonal sensitivity.

Consisting of 150 two-choice items, the POI deals with comparative value and behavior judgments. The POI is a self-administered test requiring respondents with mental ages of 14 and above. Testing time averages approximately thirty minutes. Examinees are asked to select the one statement of each pair that is most true of himself or herself. Individual responses to items are grouped into the two major scales and ten subscales and compared to normative samples resulting in a standard score.

Discriminate validity was demonstrated by Shostrom (1964) when two groups were tested. One group consisted of 29 self-actualizing people carefully

selected by clinical psychologist. The other group consisted of 34 non-self-actualizing people selected the same way. The self-actualizing group scored above a T score level of .50 while the non-self-actualizing group scored below the average.

Concurrent validity has been demonstrated by Shostrom and Knapp (1966), Hathaway and McKinley, (1951) and Fox, Knapp, and Michael (1968). Correlational relationships have been found with other scales of mental health such as the Eysenck Personality Inventory (Knapp, 1965), Guilford-Zimmerman Temperament Survey (Meredith, 1967), Sixteen Personality Factor Questionnaire (Cattell & Eber, 1957) and the Comrey Personality Scales (Comrey, 1970). Descriptive and table summaries of these validation studies can be found in the POI Handbook (Knapp, 1990) and the POI Manual (Shostrom, 1974).

Test-retest methods established reliability coefficients of .91 and .93 for the POI (Shostrom, 1964). Reported in the POI Manual are reliability coefficients for the major scales of Time Competence at .71 and Inner-Direction at .77. Coefficients for subscales range from .52 to .82. POI scores among a sample of 46 student nurses over a one-year period were reported to be fairly stable with coefficients ranging from .32 to .74 (Ilardi & May, 1968). In a review of the POI in the The Seventh Mental Measurements Yearbook (Buros, 1972), reliability coefficients range from .55 to .85. Three subscales have coefficients that might be considered substandard: Acceptance of aggression (.55), Nature of man (.66), and Feeling reactivity (.69) (Bloxom, 1972).

Shostrom (1973) stated that distortion and fakeability of the POI have been examined in a number of studies (Braun & La Faro, 1969; Fisher & Silverstein, 1969a, 1969b; Foulds & Wareheim, 1971). Studies generally found that if subjects have no prior knowledge about the POI and self-actualization, the

instrument shows resistance to faking responses. Shostrom states that from a clinical standpoint that excessively high profiles which include all T scores over 60 and 70 should be interpreted as over enthusiasm to test in accordance with "rightness".

Age and demographic data have been examined in relation to POI scores in several studies. This research is particularly relevant to several of the questions posed in this study which address age, work experience and level of education. LaBach (1969) discovered in a sample of college students, that the characteristics of age, year in college, marital status, and satisfaction with college were positively related to the POI Inner-directed (I) and Time competence (Tc) scales. LaBach additionally found that the I scale positively related to number of hours worked per week.

Age-related trends in POI scores are evidenced from a number of studies reviewed by Knapp (1990). Maslow's (1970) contention "that self-actualization of the sort I had found in my older subjects was not possible in our society for young developing people" (p. 150). Mean scores obtained from adult samples tend to be higher than those obtained from high school students; advanced college students show higher scores than entering college students; and high school students are lower scorers than either the entering or advanced college students. Rizzo and Vinacke (1975), in a comparison of college, and mature adults, and older adult samples, found a trend toward greater actualizing with increased age. Knapp (1990) concludes that there is a well established trend of increasing self-actualizing up to the early and middle adult years. Beyond age 30 to 40, the age-related trend is not as clear.

Based on the reported validity and reliability findings, the POI can be considered a valid and reliable instrument for assessing the concept of self-actualization. The POI has been proven to discriminate between self-

actualizing and non-self-actualizing individuals. An important consideration has been brought our attention by Piechowski and Tyska (1982) concerning the construct validity of the POI. Strong characteristics of self-actualization such as problem centering, profound kinship and respect for human kind and discrimination between means and ends, good and evil (an unerring sense of right and wrong are not included in the POI. “. . . Construct validity may appear to have been established empirically but still lacks the theoretical scaffolding behind it ”(p. 99). Therefore this study utilizes comprehensiveness of Dabrowski's theory, operationalized by the DRI, in conjunction with Maslow's characteristics of self-actualization, operationalized by the POI, to identify leader self-awareness.

Rahim Leader Power Inventory (RLPI)

The RLPI will be used to assess co-instructor's perception of power. Rahim (1988) created the RLPI based on French and Raven's power bases which looks at a subordinates perceptions of a supervisor's power bases. Two other popular instruments developed by Bachman, Smith, and Slesinger (1966) and Student (1968), both based on the five French and Raven power bases, are poor in convergent and content validity (Rahim, 1986). Rahim also found these two instruments to contain unacceptable retest reliability coefficients. The RLPI was designed to correct the deficiencies of these prior instruments by creating a multi-item instrument containing factorially independent subscales with substantial evidence of validity and reliability, and to show that subscales were free from social desirability response bias.

Rahim (1988) engaged in a lengthy feedback process from a pool of subjects and university faculty and factor analyzed various sets of items. Other works, published and unpublished, on power bases were studied. The initial set of

items were cast on a 5-point Likert scale with high scores indicating a greater supervisor power base. The initial instrument was completed by MBA and undergraduate students (n=117) who had jobs. After completion, an item by item discussion and critique was made.

Successive administrations occurred containing no more than 35 items each time and were factor analyzed. Successive administrations were given to a subject pool of 198, 85, 84 groups of students respectively and 108, 64, 600 groups of organizational members respectively. A 35-item questionnaire cast on a 5-point Likert Scale containing 7 items per power base resulted from the above procedures. Rahim utilized the Marlowe-Crowne social desirability scale (SDS) (Crowne & Marlowe, 1960) to check the extent to which subjects responded to RLPI items in a socially desirable manner. Pearson's correlations between the SDS and the RLPI subscales showed no significant correlations which provides some evidence that the power subscales are free from social desirability response bias.

Rahim further tested his instrument by conducting two more studies using 476 executives and 297 students with work experience. The construct validity was partly tested through factor analyses. Criterion-related validity of the RLPI was tested using multiple regression analysis against the measure of compliance with supervisor's directives and wishes. The results show that the legitimate, expert and referent power bases positively influenced compliance (Rahim, 1988). The retest and internal consistency reliability coefficients for the RLPI subscales were satisfactory. No significant correlations were found between social desirability response set and power subscales in the collegiate sample.

For the purpose of this study, the referent and expert subscales, a total of 14 questions, have been extracted from the RLPI in order to measure co-

instructor's perception of expert and referent power. See Appendix C the revised instrument used in this study to assess expert and referent power bases of co-leaders working in the outdoors.

CHAPTER III

METHOD

The purpose of this study was to explore the relationship between outdoor leader levels of self-awareness and perceptions of influence among co-leaders. Chapter III contains sections describing the sample, instrumentation, procedures, scoring of assessment measures, research questions, and data analysis procedures.

Sample of Outdoor Leaders

The 40 outdoor leaders invited to participate in this study consisted of challenge course instructors employed year round by a large midwestern university. These challenge course instructors typically facilitate one-day challenge course experiences for a variety of groups ranging from 10 to 50 people in size. Examples of group types include church groups, youth organizations, university student and faculty groups, therapy groups, corporate groups, school groups, military groups, drug prevention programs, family gatherings and summer camps. All challenge course instructors worked as part-time employees and were certified challenge course instructors by the employing university.

The challenge course instructors (CCIs) led groups, in an outdoor setting through a progression of games and other activities to foster team work, communication, leadership development, self-confidence and other group goals. Challenge course participants perceived some degree of psychological and physical risk during each activity which is an inherent quality found in outdoor adventure pursuits (Ewert, 1989). Participants are challenged by instructors to solve problems under potentially stressful conditions in order to stimulate movement towards group and individual goals. For example, a group

of ten individuals must accomplish a designated task by traversing wire cables and swinging logs, sometimes thirty feet off the ground. Upon completion of the task, the CCI facilitates a process for participants to formally reflect on the experience.

The sample of CCIs used in this study all participated in a four-day, in-house certification workshop and completed a series of apprenticeships before becoming fully certified. Apprenticeships consisted of assisting fully certified instructors during all aspects of the one-day experience. All subjects surveyed for this study were fully certified CCIs. Instructor to participant ratios are dependent upon the group make-up. Course operating procedure dictated a minimum standard of two instructors and a ratio of one instructor for every ten participants. The sample instructor pool for this study operated as a peer group working in instructor teams ranging from 2 to 5 individuals. The course administrator randomly assigned, one month in advance, a leader of the day (LOD) among the scheduled instructor team for any given day. All certified instructors were afforded the chance to serve as LOD and assumed the responsibilities as outlined by the course administrator. The instructor team arrived in advance of groups to plan the day and remained afterwards to evaluate the experience among the instructor team.

The group of outdoor leaders solicited for this study consisted of an intact group at one university, therefore; this sample is not random and may not be representative of other outdoor leaders. The researcher chose this sample due to the complex problem of identifying and obtaining access to enough co-leaders with the ability to appropriately assess peers. The identified sample group for this study consisted of 21 female instructors and 19 males for a total of 40 identified subjects. The number of respondents consisted of 17 females and 16 males for a total sample size of N=33 CCIs. An 83% response rate was

obtained. Chronological age of subjects ranged from 20 to 50 with an average age of 29. Work experience ranged from two months to 144 months as a CCI with an average work experience of 28 months. Twelve subjects were currently completing baccalaureate degrees. Ten subjects had completed their bachelors degree. Eleven subjects were either completing a graduate degree or possessed a master's degree. No demographic data were obtained with regard to race. However, based on contact with the sample by the researcher, the group of instructors was predominantly Caucasian. Native American heritage could be found in a small percentage of the group. The study was reviewed and approved by the university's Institutional Review Board for human subject treatment (Appendix E).

Instrumentation

Two psychological assessments, the Personal Orientation Inventory (POI) and the Definition Response Inventory (DRI), were utilized to determine an outdoor leader's level of self-awareness. A third instrument, the Rahim Leader Power Inventory (RLPI), was used to obtain perception's of co-leader influence. These instruments were received a full review in Chapter II of this study, and samples of these assessment tools can be found in Appendices A and C with the exception of the copyrighted POI.

The DRI consisted of six open-ended questions with a question per page allowing the respondent to use the back if necessary. The DRI was used to assess the developmental level of each respondent based on Dabrowski's "Theory of Emotional Development". Dr. Nancy Miller provided the instrument and administration instructions for the DRI and arranged for professionally trained scorers to score each completed instrument. The POI, the second tool to assess self-awareness, is a self-administered questionnaire consisting of 150

two-choice comparative-value judgment items. A profile of measures results from the POI that reflects the theoretical concepts and characteristics of a self-actualizing person as proposed by Abraham Maslow. Test booklets, answer sheets, hand scoring stencils and manual were purchased for from the Educational and Industrial Testing Service (EdITS), San Diego, CA.

The RLPI was utilized to assess co-leaders' perceptions of expert and referent power among the challenge course instructor sample. Designed as a tool for subordinates to assess their supervisors, the RLPI was altered slightly by the researcher to fit the context of this study. The expert and referent subscales were extracted from a total of five subscales, therefore; legitimate, coercive and reward power subscales were not assessed. Questions were reworded slightly to fit the challenge course co-worker context. See Appendix D for an original of the complete RLPI. Dr. Afzalur M. Rahim provided permission and a copy of the questionnaire and code sheet for use in this study.

A personal data questionnaire combined with an introductory letter contained four questions to solicit demographic information (Appendix F). Data regarding age, gender, work experience and educational background were used as independent variables to assess relationships between self-awareness and power.

Procedures

Data collection began by obtaining the respondent's permission to participate in the study. The researcher announced and discussed the purpose of the study during one of the required monthly CCI meetings. Confidentiality was discussed based on the sensitive nature of the self-disclosure questionnaires and the evaluation of co-instructors. Consent forms (Appendix G) were distributed, completed and returned during this meeting. Anyone who

chose not to complete a consent form was removed from the sample pool. Respondents who did not attend the meeting were either telephoned or met with the researcher personally to obtain verbal permission. All respondents eventually completed written consent forms.

Once permission was obtained, the participants received packets consisting of a cover letter and three sections. The contents included the following: (1) cover letter and demographic questionnaire, (2) section 1 cover, instructions, and the DRI; (2) section 2 cover, initial instructions, the POI booklet, and POI answer sheet; and, (3) section 3 cover, initial instructions, and an RLPI for each of the 40 respondents. See Appendix H for examples of section covers and instructions found in each section of the respondent research packet.

Approximately two and one half months elapsed before data were returned from all 33 respondents. The researcher conducted numerous follow-up phone calls to acquire the final few responses.

Scoring of Assessment Measures

Scoring the POI:

Subject responses to the POI were recorded on answer sheets that were scored using a hand scoring stencil provided by the Educational and Industrial Testing Service (EdITS). A separate scoring stencil corresponded with each of the 12 POI scales. Raw scores for each of the 12 scales were obtained by placing the stencil over the answer sheet and counting the number of marked responses. The researcher recorded the total number of marked responses per scale in the designated section found on each individual answer sheet.

Shostrom (1974) recommended that "scores from the Time Competence scale and the Inner-directed scale be used in preference to the ratio scores, due to the statistical complexities of ratio scores" (p. 6). The Time Competence and

Inner-directed scales are the only two scales out of the twelve that do not have overlapping items. As a result, Shostrom explains that a researcher may estimate an examinee's level of self-actualization by looking at these two important scales. Therefore, research questions three, four, five and six of this study address self-actualization using only the Time Competence and Inner-directed scales.

Raw scores for all 12 scales were converted into standard scores by the researcher utilizing an example Profile Sheet found in the POI manual. The Profile Sheet for the POI was constructed from adult norms. Raw scores were plotted on the scale to determine an approximate standard score. The mean standard score for the scale was 50, with a standard deviation of 10. This translated into a percentage which said that 95% of the population will theoretically fall between the standard scores of 30 and 70.

Scoring of the DRI:

Subject responses to the DRI consisted of written responses to six open-ended questions with one question per page for a total of six pages. A grand total of 198 pages were completed by the 33 subjects. Code numbers assigned to each subject were placed on all six of the original responses. The 198 pages of original responses (33 sets) were photocopied twice and mailed to Dr. Nancy Miller of the University of Akron, Ohio for scoring. Dr. Miller created the Miller Assessment Coding System (MACS) based on the work of Dabrowski and Piechowski (1977). The definitions of the categories and subcategories of the coding system are based on the dynamisms from Dabrowski and Piechowski (1977) and the value orientations from Allport, Vernon and Lindzey (1960).

Dr. Miller assigned four coders to complete the lengthy process of scoring. The questionnaires were divided so that each coder received 17 instruments.

Each of the 34 questionnaires was scored by two coders. Scoring took approximately four months to complete. A fee of \$5.00 per set was charged for a total of \$340.

Coders analyzed each of the six open-ended questions separately, assigning a level rating to each of the six items. Raters searched for themes as the unit of text to be coded. Themes were identified and coded in the appropriate category (values, self, or others). After themes were identified, subcategory placement was determined. Subcategories represented the developmental levels (1.0, 2.0, 3.0, 4.0 or 5.0). To compute the level score, the themes at each level were counted and those at level 1 are multiplied by 1, those at level 2 are multiplied by 2, and the same process continued as levels increased. This total was then divided by the number of themes scored. This averaged score was rounded to the nearest tenth. If the difference between two raters on a subject's overall score differed by more than .5, a third rater was used as an arbitrator. The two closest scores of the three raters were recorded and averaged to yield the subject's developmental level. Inner-rater reliability was calculated using a Pearson product-moment coefficient (Pearson r) which yielded a coefficient of .85.

Scoring the RLPI:

Subjects received adapted RLPIs in their packets. Each questionnaire contained an instructor's name to designate who was being evaluated. If subjects had co-instructed at least once with the individual whose name appeared on the questionnaire, subjects were instructed to complete that questionnaire. Not all individuals had co-instructed with one another, so some questionnaires were left blank. The range of responses received per individual ranged from 12 to 29 responses. In other words, some instructors co-led with

only 12 people during their employment while others co-lead with 29 instructors.

The RLPI consisted of a 5 point Likert-scale. Five represented a higher score or stronger power base while 1 represented a lower score or weaker power base. The test consisted 12 items split so that 6 questions assessed both the referent and expert power indices. Questions 1,4,7,8,10 and 11 assessed referent power. Questions 2,3,5,6,9 and 12 assessed expert power. Items 4, 11, and 12 were reversed in accordance with Dr. Rahim's design to ensure greater internal consistency of the rater. These items were reversed to calculate an accurate total score.

Each subject was rated by 12 to 29 raters, for example 12 raters would produce 12 referent and 12 expert power scores. To find a referent power score, items 1,4,7,8,10 and 11 were summed then divided by 6 to calculate a mean. The same was done to find expert scores by averaging items 2,3,5,6,9 and 12. First, individual rater averages per instrument were calculated for each subject. Next, all rater averages were combined and averaged to calculate a mean of the means. The mean of the means score provided the overall power scores for both the expert and referent power scales per subject.

Research Questions and Analysis

The following six research questions addressed in this study are reviewed and accompanied by a brief summary of statistical procedures used in analysis. Accompanying each question, an hypothesis is stated.

Question 1: What is the relationship between co-instructors' perceptions of expert and/or referent power to (a) Dabrowskian developmental levels and (b) POI scale scores?

Analysis: Pearson product-moment correlation coefficients (Pearson r 's) were obtained to provide quantitative indices of the degree of correlation between the following:

- (1) The RLPI measurement of the expert power base and the levels of development established by the DRI.
- (2) The RLPI measurement of the referent power base and the levels of development established by the DRI.
- (3) The RLPI measurement of the expert power base and the POI measurement for all 12 scales.
- (4) The RLPI measurement of the referent power base and the POI measurement for all 12 scales.

A positive, strong association is expected between both power bases and levels of development as measured by the DRI. It is hypothesized that an outdoor leader's power base (referent and expert) increases so does his or her level of development. A positive, strong association is hypothesized between power bases and assessment of self-actualization as measured by the POI. It is hypothesized that an outdoor leader's power base (referent or expert) increases so does his or her characteristics of self-actualization increase.

Question 2: What is the relationship between Dabrowskian developmental levels and the 12 POI scale scores?

Analysis: Pearson product-moment correlation coefficients (Pearson r 's) were obtained to provide quantitative indices of the degree of correlation between the following:

- (1) The levels of development established by the DRI and the POI measurements for all 12 scales.

High correspondence is hypothesized between the DRI index of developmental level and the assessment of self-actualization as measured by the POI. Beach (1980) reported high correspondences on 8 of the 12 POI scales, (Tc, I, SAV, Ex, Fr, Sa, A, and C) in a sample of 51 women. Beach reported a sample developmental level mean of 1.93. As found in Beach's study, the sample for this study is hypothesized to be operating at at Level I (primary integration) or Level II (unilevel disintegration) which coincides with the expected developmental levels of the general population. Beach presents the possibility that, "the significant correspondence which were indicated between POI and DRI measures may reflect a consistency of score relationships expected for DRI indices indicating development at TPD Level II" (p. 193).

Piechowski (1978) demonstrated that the POI does not truly capture the construct of self-actualization as found in level IV of Dabrowski's "Theory of Emotional Development"; therefore, to compare POI scores with with DRI scores of individuals operating at Level IV would be an unrealistic expectation based on the hypothesized developmental level of I or II for this study.

Question 3: What is the effect of chronological age on (a) the primary POI scale scores of Time Competence (Tc) and Inner Directed (I) (b) Dabrowskian developmental levels and (c) perceptions of expert or referent power?

Analysis: A one-way analysis of variance was conducted by comparing three age groups: (ages 21 to 23, n=8), (ages 24 to 30, n=13) and (ages 31 to 50, n=12). The following represent the combinations of variables assessed:

- (1) The relationship between RLPI measurements of the expert power base and chronological age.
- (2) The relationship between RLPI measurements of the referent power base and chronological age.

(3) The relationship between POI measurements of self-actualization for the Tc and I scales and chronological age.

(4) The relationship between DRI measurements of developmental levels and chronological age.

It is hypothesized that differences will be found between the Tc and I POI scales and age based on prior research (Knapp, 1976). No significant differences between DRI measurements of emotional development and chronological age are hypothesized. Rather than in terms of age, the "Theory of Emotional Development" postulates that development is measured in terms of restructuring of underlying affective and cognitive organization (Dabrowski & Piechowski, 1977). If no psychological restructuring occurs, then no psychological development takes place.

Based on the idiosyncratic nature of referent and expert power, no significant differences are hypothesized between chronological age and power bases.

Question 4: What is the effect of work experience as an outdoor leader on (a) the primary POI scale scores of Tc and I (b) Dabrowskian developmental levels, and (c) perceptions of expert or referent power?

Analysis: A one-way analysis of variance was conducted by comparing three groups based on number of months worked: (2 to 12 months of work experience, n=14), (13 to 24 months of work experience, n=10) and (more than 24 months of work experience, n=9). The following represent the combinations of variables assessed:

(1) The relationship between RLPI measurements of the expert power base and number of months worked.

(2) The relationship between RLPI measurements of the referent power base and number of months worked.

(3) The relationship between POI measurements of self actualization for the Tc and I scales and number of months worked.

(4) The relationship between DRI measurements of developmental levels and number of months worked.

It is hypothesized that significant differences will be found between the Tc and I POI scales and work experience based on prior reported research (LaBach, 1969). No significant relationships are hypothesized between DRI measurements of emotional development based on the number of months worked as an outdoor leader. As discussed in research question number three with chronological age, the number of months worked should not affect structural and functional psychological reorganization. Dabrowski's theory postulates that individual development may follow the maturational stages of the life cycle without any profound psychological transformation (Dabrowski & Piechowski, 1977).

Based on the idiosyncratic nature of expert and referent power, it is hypothesized that no significant difference will be found between work experience and each of the power bases.

Question 5: What is the effect of level of education on (a) the primary POI scale scores of Tc and I (b) Dabrowskian developmental levels, and (c) perceptions of expert or referent power?

Analysis: An analysis of variance was conducted by comparing the three groups at different educational levels: (undergraduates, n=12), (completed bachelors degree, n=10) and (graduate students or possess a masters degree, n=11). The following represent the combinations of variables assessed:

(1) The relationship between RLPI measurements of the expert power base and amount of education completed.

- (2) The relationship between RLPI measurements of the referent power base and amount of education completed.
- (3) The relationship between POI measurements of self actualization for the Tc and I scales and amount of education completed.
- (4) The relationship between DRI measurements of developmental levels and amount of education completed.

It is hypothesized that differences will be found between the Tc and I POI scales and level of education based on prior reported research (Knapp, 1976). It is hypothesized that no significant relationships will be found between DRI measurements of emotional development based on the educational level of an outdoor leader. As discussed in research questions three and four, level of education should not affect the structural and functional psychological reorganization of an outdoor leader.

As with age and work experience, it is hypothesized that no significant difference will be found between level of education and expert and referent power bases.

Question 6: What is the effect of gender on (a) the primary POI scale scores of Tc and I (b) Dabrowskian developmental levels, and (c) perceptions of expert or referent power?

Analysis: An analysis of variance was conducted by dividing the sample into groups by gender: (males, n=16) and (females, n=17). The following represent the combinations of variables assessed:

- (1) The relationship between RLPI measurements of the expert power base and gender.
- (2) The relationship between RLPI measurements of the referent power base and gender.

(3) The relationship between POI measurements of self actualization for the Tc and I scales and gender.

(4) The relationship between DRI measurements of developmental levels and gender.

It is hypothesized that no significant relationships will be found between gender and: (1) DRI measurements of emotional development, or (2) POI measurements. As with age, work experience and level of education, gender should not affect emotional development or level of self-actualization.

Dabrowski's theory has been used to explain female development as well as male development (Silverman & Schuppin, 1989). When Shostrom developed the norms for the POI, he found no significant differences between male and female scores. Fox (1965) also found no significant sex differences on the POI scales.

It is hypothesized that no differences will be found between gender and expert or referent power bases. A note should be made however, that Rahim (1988) in his development of the RLPI did not take into account gender.

CHAPTER IV

RESULTS

In this chapter, the results of the statistical analyses are presented in seven sections. The first section summarizes the descriptive statistics for the variables in this study. The remaining six sections address each of the research questions.

Descriptive Statistics

The participants for this study $N=33$ consisted of 17 female and 16 male outdoor leaders with a mean chronological age of 29.0 and standard deviation of 7.7. Ages ranged from 21 to 50 years of age. Subjects' work experience ranged from 2 months to 144 months with an average of 27.9 months and a standard deviation of 29.9. The means and standard deviations for power scores, developmental levels and POI scale scores for the entire sample of outdoor leaders has been summarized (Table 4) . Table 5 summarizes the means and standard deviations of developmental levels, Time Competency scores, Inner-directed scores, referent power scores and expert power scores broken down into appropriate subgroups by age, work experience, educational level and gender for the purpose of answering research questions 3 through 6.

The following brief review is presented to ensure interpretive ease when reviewing the table of means. The highest possible DRI score (index) obtainable is a score of 5.0 representing the fifth level of development according to Dabrowski. The lowest possible DRI score is a 1.0 representing the lowest level of development. The 12 POI scales were separately scored and plotted on a standardized POI profile sheet for adult norms provided in the POI Manual (Shostrom, 1974, p. 24). The mean-score is a T score of 50 with a

Table 4

Table of Means for Power Scores, Developmental Level and POI Scale Scores

N=33	MEAN	S D	RANGE
Power Scores			
Expert	3.8	.43	3.1-4.6
Referent	4.2	.28	3.5-4.6
Developmental Level Scores			
Group DRI score	2.22	.266	1.82-2.92
POI Scale Scores			
Time Competence (Tc)	44.1	10.6	25-58
Inner Directed (I)	49.9	7.2	36-62
Self-actualizing Value (SAV)	55.8	6.2	39-66
Existentiality (Ex)	47.6	8.6	32-62
Feeling reactivity (Fr)	51.3	8.6	27-65
Spontaneity (S)	55.1	8.6	38-80
Self-regard (Sr)	53.4	6.3	35-63
Self-acceptance (Sa)	44.5	7.9	27-55
Nature of man (Nc)	48.2	8.6	25-65
Synergy (Sy)	49.2	9.1	23-63
Acceptance of aggression (A)	49.2	9.6	29-62
Capacity for intimate contact (C)	49.1	8.2	31-62

standard deviation of 10. The RLPI scores range from 1, the lowest score or weakest power base, to a 5 which is the highest score and strongest power base.

Table 5

Table of Means for Sample Subgroups

Sub-groups	Develop- mental Level		POI Tc Scale		POI I Scale		Expert Power		Referent Power	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Age										
21-23 (n=8)	2.18	.24	37.13	8.89	43.88	4.67	3.47	.23	4.10	.23
24-30 (n=13)	2.27	.21	44.46	10.74	49.47	7.02	3.89	.34	4.26	.21
31-50 (n=12)	2.19	.27	48.50	9.78	54.50	5.62	4.03	.48	4.25	.36
Work Experience in Months										
2-12 (n=14)	2.15	.23	44.14	11.23	50.29	7.43	3.53	.32	4.20	.33
13-24 (n=10)	2.30	.33	42.90	9.11	45.80	6.10	3.82	.26	4.23	.25
>24 (n=9)	2.22	.25	45.56	12.21	54.00	5.81	4.33	.21	4.24	.22
Educational Level										
Undergraduates (n=12)	2.19	.25	41.75	10.96	48.00	6.80	3.65	.36	4.17	.23
Baccalaureates (n=10)	2.19	.26	46.00	10.86	48.00	7.67	3.77	.36	4.22	.26
Grad. Students/ Masters (n=11)	2.27	.31	45.09	10.57	53.88	5.93	4.09	.46	4.27	.34
Gender										
Male (n=16)	2.16	.36	43.94	9.79	49.75	6.82	3.91	.44	4.19	.24
Female (n=17)	2.27	.19	44.35	11.66	50.12	7.66	3.76	.41	4.26	.31

Based on the empirical work by Piechowski (1978), the construct of self-actualization is revealed at Level IV, the level of organized multilevel disintegration (see Chapter II). Level III was described as the level of spontaneous multilevel disintegration, while Level II of the "Theory of Emotional Development" (TED) was described as the level of unilevel disintegration. In TED, development at Level II was conceptualized as horizontal as opposed to vertical. A developmental level index of 1.5 and below indicates development at Level I. An index between 1.6 and 2.5 indicates developmental at Level II (Lysy, 1979). A developmental index above 2.5 is interpreted as an estimate of potential for vertical, developmental movement in the direction of self-

actualization. Beach (1980) has empirically explored at the relationship between the 12 POI scales and Dabrowski's developmental levels. She found high correlations between 8 of the 12 POI scale scores (Tc, I, SAV, Ex, Fr, Sa, A, and C) and DRI indices of development; therefore, the general expected finding for this study should coincide with Beach's work.

Research Question 1

What is the relationship between co-instructors' perceptions of expert and referent power to (a) Dabrowskian developmental levels, and (b) POI scale scores?

Pearson product-moment correlation coefficients (Pearson r 's) were computed between perceptions of expert and referent power and Dabrowskian developmental levels. Perceptions of expert and referent power and developmental levels were found to have no positive, significant relationships. This finding contradicts the hypothesized finding that there would be a positive, strong association between the two variables. A coefficient of .140 was computed when the variables of expert power and developmental level were correlated. A coefficient of .264 resulted when the variables of referent and developmental level were analyzed among all subjects.

Pearson r 's were also computed for analysis of correspondence between perceptions of expert and referent power and all POI scale scores (Table 6). Perceptions of expert and referent power and all POI scale scores were found to have low to moderate associations. The following coefficients were calculated between expert power and Tc = .171, I = .357, SAV = .460, Ex = .239, Fr = .367, S = .394, Sr = .002, Sa = -.089, Nc = .294, Sy = .293, A = .160, C = .299. The following coefficients were calculated between referent power and Tc = .156, I = .198, SAV = .208, Ex = .190, Fr = .088, S = .128, Sr = .143, Sa = -.015, Nc =

.208, Sy = .016, A = -.109, C = .169. Bonferroni probabilities were also computed to further interpret the results, and no significant probabilities of less than or equal to .05 were found.

Shavelson (1988) states that correlation coefficients of .30 or less demonstrate a low magnitude or weak association between variables. A coefficient greater than .30 up to .60 is considered to demonstrate a moderate association. Based on the findings, expert power clearly demonstrates a stronger relationship of association with self-actualizing values than does referent power.

Table 6

Pearson Correlations Between POI Scale Scores and Expert Power Scores, Referent Power Scores and Developmental Level (DRI scores)

POI Scales	Expert Power	Referent Power	DRI
Tc	.171	.156	.160
I	.375	.198	.154
SAV	.460	.208	.134
Ex	.239	.190	.020
Fr	.367	.088	.131
S	.394	.128	-.077
Sr	.002	.143	-.031
Sa	.089	-.015	.012
Nc	.294	.208	.322
Sy	.293	.016	.226
A	.160	-.109	-.043
C	.299	.169	.247

^aSample Size (N=33)

Research Question 2

What is the relationship between Dabrowskian developmental level and each of the 12 POI scale scores?

Pearson r 's were computed for analysis of correspondence between Dabrowskian developmental levels and the 12 POI scale scores (Table 6). No strong or moderate relationships existed between developmental level scores and all 12 POI scores. This finding does not correspond completely to previous findings (Beach, 1980). The following coefficients were calculated between developmental level scores and POI scores: $T_c = .160$; $I = .154$; $SAV = .134$; $Ex = .020$; $Fr = .131$; $S = -.077$; $Sr = -.031$; $Sa = .012$; $Nc = .322$; $Sy = .226$; $A = -.043$; $C = .247$. Bonferroni probabilities were also computed to further interpret the results, and no significant probabilities of less than or equal to .05 were found.

Research Question 3

What is the effect of chronological age on (a) the primary POI scales of Time Competence (T_c) and Inner-directed (I), (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

A One-Way Analysis of Variance (ANOVA) was conducted to analyze the relationship between chronological age and T_c . A One-Way Analysis of Variance was also conducted to analyze the relationship between age and I . The participants were divided into three subgroups: ages 21 to 23, ($n=8$); ages 24 to 30, ($n=13$); and ages 31 to 50, ($n=12$). The T_c and I mean scores were calculated and compared between groups to determine any real differences. No significant relationship was found when comparing Time Competence with an outdoor leader's age, $F(2,30) = 3.113$, $p > .05$. Although, as suspected, significant relationship was discovered between the POI Inner-directed scale and an outdoor leader's age, $F(2,30) = 7.52$, $p \leq .01$, (Table 7).

Table 7

ANOVA Summary Table Between Inner-directed and Age

Source	SS	DF	MS	F
Age	546.77	2	273.39	7.52**
Error	1091.12	30	36.37	

** $p \leq .01$

A post-hoc analysis was conducted to determine where the real differences occurred among the three age categories based in Inner-directedness. The resulting post-hoc analysis determined that a significant difference occurred between the youngest group (ages 21 to 23, $M=43.88$) and the oldest group (ages 31 to 50, $M=54.50$), $F(1,30) = 14.90$, $p \leq .001$. A significant difference in Inner-directedness was also discovered during the post-hoc analysis between the middle group (ages 24-30, $M=49.47$) and the older group, $F(1,30) = 4.36$, $p \leq .05$, and the younger group, $F(1,30) = 4.25$, $p \leq .05$.

A One-Way ANOVA between an outdoor leader's chronological age and developmental level showed no significant relationship, $F(2,30) = .35$, $p > .05$. A One-Way ANOVA between chronological age and expert and referent power was also conducted. No significant relationship was found between co-leader's perceptions of referent power and the chronological age of outdoor leaders, $F(2,30) = .97$, $p > .05$. An unexpected, significant relationship resulted when comparing perceptions of expert power with chronological age, $F(2,30) = 5.50$, $p \leq .01$, (Table 8).

A post-hoc analysis was conducted to determine where the real differences occurred among the sample of outdoor leaders based on co-leaders' perceptions of expert power and chronological age. The resulting post-hoc

analysis determined that a significant difference in perceived expert power occurred between the youngest group (ages 21 to 23, $\bar{M}=3.47$) and the oldest group (ages 31 to 50, $\bar{M}=4.03$), $F(1,30) = 10.62$, $p \leq .01$. A significant difference was also found between the middle group (ages 24 to 30, $\bar{M}=3.89$) and younger group, $F(1,30) = 6.10$, $p \leq .05$. Post-hoc analysis showed no significant differences in perceptions of expert power between the middle and older group.

Table 8

ANOVA Summary Table Between Expert Power and Age

Source	SS	DF	MS	F
Age	1.56	2	0.78	5.50**
Error	4.26	30	0.14	

** $p \leq .01$

Research Question 4

What is the effect of work work experience as an outdoor leader on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

A One-Way Analysis of Variance (ANOVA) was conducted to analyze the relationship between work experience and the POI scale of Tc. Another ANOVA was conducted to analyze the relationship between work and the POI scale of I. The sample was divided into three subgroups: 2 to 12 months of work experience, ($\bar{n}=14$); 13 to 24 months of work experience, ($\bar{n}=10$); and more than 24 months of work experience, ($\bar{n}=9$). The Tc and I mean scores were calculated and compared between groups to determine any real differences.

No significant relationship was found when comparing Time Competence with work experience, $F(2,30) = .14$, $p > .05$. Although, a suspected, significant relationship resulted when comparing Inner-directed with work experience, $F(2,30) = 3.66$, $p \leq .05$, (Table 9).

Table 9

ANOVA Summary Table Between Inner-directedness and Work Experience

Source	SS	DF	MS	F
Work Experience	321.42	2	160.71	3.66*
Error	1316.46	30	43.88	

* $p \leq .05$

A post-hoc analysis showed a significant difference in Inner-directedness between the second group (13 to 24 months of work experience, $M=45.80$) and the third group (>24 months of work experience, $M=54.00$), $F(1,30) = 7.29$, $p \leq .05$. There were no other significant differences found between any of the other groups based on Inner-directedness during the post hoc analysis.

A One-Way ANOVA between the amount of work experience and developmental levels showed no significant relationship, $F(2,30) = .82$, $p \geq .05$. An ANOVA between the amount of work experience and expert and referent power was also conducted. Also, no significant relationship was found between referent power and an outdoor leader's amount of work experience, $F(2,30) = .07$, $p \geq .05$. An unexpected, significant relationship resulted when comparing expert power with the amount of work experience accumulated by an outdoor leader, $F(2,30) = 23.12$, $p \leq .001$, (Table 10).

A post-hoc analysis was conducted to determine where the real differences occurred between expert power and work experience. The resulting post-hoc

Table 10

ANOVA Summary Table Between Expert Power and Work Experience

Source	SS	DF	MS	F
Work Experience	3.53	2	1.77	23.12***
Error	2.29	30	0.08	

*** $p \leq .001$

analysis determined that a significant difference in perceptions of expert power occurred between all three groups broken down by work experience, $p \leq .001$. A post-hoc analysis between the groups with 2 to 12 months of work experience ($M=3.53$) and 13 to 24 months of work experience ($M=3.82$) showed significant difference in perceptions of expert power, $F(1,30) = 46.22$, $p \leq .001$. A post-hoc analysis between groups with 2 to 12 and more than 24 months ($M=4.33$) resulted in a significant difference, $F(1,30) = 46.22$, $p \leq .001$. A final post-hoc analysis between the groups with 13 to 24 and more than 24 months of work experience also resulted in a significant difference, $F(1,30) = 15.87$, $p \leq .001$. In summary, there was a significant, unexpected difference between the amount of work experience had and co-leaders' perceptions of expert.

Research Question 5

What is the effect of level of education on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

A One-Way Analysis of Variance (ANOVA) was conducted to analyze the relationship between level of education and the POI scale of Tc. The same was also done to analyze the relationship between level of education and the POI

scale of 1. The sample was divided into three subgroups: undergraduates, ($n=12$); completed bachelors degree, ($n=10$); and graduate students or masters degree holders, ($n=11$). The Tc and I mean scores were calculated and compared between groups to determine any real differences. No significant relationship was found between Time Competence and the educational level of an outdoor leader, $F(2,30) = .49, p > .05$. Also, no significant relationship was found when comparing Inner-directedness with an outdoor leader's educational level, $F(2,30) = 2.68, p > .05$.

A One-Way ANOVA conducted between educational level and developmental levels resulted in no significant relationship, $F(2,30) = .27, p > .05$, as expected. A One-Way ANOVA between educational level and perceptions of expert and referent power also was conducted. No significant relationship was found between co-leaders' perceptions of referent power and outdoor leader's educational level, $F(2,30) = .41, p > .05$. Although, an unexpected, significant relationship resulted when comparing perceptions of expert power with educational level, $F(2,30) = 3.88, p \leq .05$, (Table 11).

Table 11

ANOVA Summary Table Between Educational Level and Expert Power

Source	SS	DF	MS	F
Educational Level	1.20	2	0.60	3.88*
Error	4.63	30	0.15	

* $p \leq .05$

The post-hoc analysis of all three groups resulted in a significant difference in co-leaders' perceptions of expert power between the first group of current undergraduate students ($M=3.65$) and the third group consisting of graduate

students and master degree holders ($\underline{M}=4.09$), $\underline{F}(1,30) = 7.40$, $p \leq .05$. No significant differences were found between the first group and second group consisting of baccalaureate degree holders ($\underline{M}=3.77$). Also, no significant differences were found between baccalaureate degree holders and graduate students/masters based on co-leaders' perceptions of expert power.

Research Question 6

What is the effect of gender on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

A One-Way Analysis of Variance (ANOVA) was conducted to analyze the relationship between level of education and the POI scale of Tc. The same was conducted to analyze the relationship between gender and the POI scale of I. The sample was divided into two subgroups: (males, $\underline{n}=16$) and (females, $\underline{n}=17$). The Tc and I mean scores were calculated and compared between groups to determine any real differences. No significant relationship was found when comparing male and female Time Competency, $\underline{F}(2,30) = .01$, $p > .05$. Also, no significant relationship resulted when comparing male and female Inner-directedness, $\underline{F}(2,30) = .02$, $p > .05$.

A One-Way ANOVA between and outdoor leader's gender and his or her developmental level showed no significant relationship, $\underline{F}(2,30) = 1.21$, $p > .05$. A One-Way ANOVA between an outdoor leader's gender and co-leaders' perceptions of expert and referent power was also conducted. No significant relationship was found between perceptions of referent power and gender (males, $\underline{M}=4.19$) and (females, $\underline{M}=4.26$), $\underline{F}(2,30) = .41$, $p > .05$. Also, no significant relationship resulted when comparing expert power with gender (males, $\underline{M}=3.91$) and (females, $\underline{M}=3.76$), $\underline{F}(2,30) = .93$, $p > .05$. As expected, no

significant relationship exists between co-leaders' perceptions of power based on a co-leader's gender.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

The first four chapters of this study contained the Introduction, Review of Literature, Methods and Results. Chapter V presents: (1) a review of the study; (2) summary of research questions and results followed by conclusions; recommendations and future research; and, (3) implications of this study.

Review of the Study

Preparing individuals to lead safe, enjoyable, and environmentally sound adventure education activities represents a critical issue among adventure education professionals. Two important domains that must be addressed when training outdoor leaders are the development of technical skills or “hard skills” and leadership skills or “soft skills.” “Hard skill” development typically involves the physical aspects of outdoor leadership such as navigation, reading whitewater or climbing anchor placement. “Soft skill” development includes topics such as small group management, conflict resolution, communication enhancement and self-assessment.

The concept of self-awareness potentially plays a major role in a leader's “soft skill” development. The definition and role of self-awareness has received minimal attention within adventure education body of literature. Self-awareness may be a critical component that dictates how a leader influences relationships when in the leadership role. An important, but little understood relationship common to adventure activities, is the co-leader relationship. Outdoor adventure activities typically require more than one leader to ensure safety and program quality.

The purpose of this study was to examine the relationship between outdoor leader self-awareness and co-leaders' perceptions of influence. Self-awareness was considered for this study to be based on Kazimierz Dabrowski's (1967) "Theory of Positive Disintegration" and Abraham Maslow's (1968,1971) concept of self-actualization. Currently known as Dabrowski's "Theory of Emotional Development", this theory provided the conceptual framework for defining and identifying the characteristic of leader self-awareness. Dabrowski created a non-linear stage theory of human development which included the concept of self-awareness found in higher levels of development. Maslow's work on self-actualization has also produced identifiable attributes that further help researchers assess a leader's level of self-awareness.

Based on the assumption that self-awareness influences human relationships, the concept of influence had to be defined and operationalized for this study. French and Raven's (1959) five categories of power served as the theoretical foundation for understanding influence. In particular, the categories of expert and referent power appear to be the two types of power most closely related to the construct of self-awareness. Referent and expert power are more character and personality based, therefore idiosyncratic in nature as opposed to the remaining types of power known as coercive, reward and legitimate power.

This study attempted to define and assess levels of outdoor leader self-awareness on a continuum stemming from Dabrowski and Maslow's theories. To operationalize self-awareness, the Definition Response Instrument (DRI) based on Dabrowski and Piechowski's (1977) work and the Personal Orientation Inventory (POI) based on Maslow's (1968, 1970) work were utilized. The DRI consisted of six open-ended questions scored by trained raters. DRI scores placed subjects within one of five developmental levels according to Dabrowski's theory.

Level I is described as where egocentrism prevails by identifying individuals who tend to blame and lack self-responsibility. Level II shows that individuals are primarily influenced by their social group and mainstream values. They often exhibit ambivalent feelings because they have no clear set of values. At Level III, people tend to develop a hierarchical sense of values. There can be much inner conflict in order to strive towards higher standards. At level IV individuals are well on their way to self-actualization. They have found a way to reach personal ideals and are effective leaders in society. Level V individuals have won the struggle for self-mastery. Life is lived in service to humanity and to the most universal principles of loving with compassionate regard for the worth of the human individual.

To assess Maslow's conception of self-actualization, the POI was developed (Shostrom, 1974) consisting of 150 two-choice comparative-value-judgment items reflecting values and behavior seen to be of importance in the development of self-actualizing individuals. To assess influence, the Rahim Leader Power Inventory (RLPI) was utilized (Rahim, 1988). This instrument was specifically designed to assess a subordinate's perceptions of his or her supervisor's level of power from low to high. The RLPI was altered for this study in order to fit the context of co-leader assessment.

The subjects for this study consisted of outdoor leaders (N=33) who served as challenge course instructors for a major university in the mid-west. The solicited group of outdoor leaders consisted of a convenient sample of co-workers who facilitated one-day challenge course experiences for a variety of populations. The sample group consisted of 17 females and 16 males with ages ranging from 20 to 50 and an average age of 29. Work experience ranged from 2 months to 144 months with an average work experience of 28 months. Educational levels ranged from current college undergraduates to individuals

who had completed masters degrees. All 33 subjects were administered and completed the POI, DRI and RLPI for analyses.

Summary of Research Question Results, Conclusions and Recommendations

Research Question 1: What is the relationship between co-instructors' perceptions of expert and referent power to (a) Dabrowskian developmental levels, and (b) POI scale scores?

Summary of Results: Pearson product-moment correlation coefficients (Pearson r 's) were computed for analysis of correspondence. Co-leaders' perceptions of expert and referent power and developmental levels of outdoor leaders were found to have positive, weak associations. Perceptions of expert power and the POI scales of I, SAV, Fr, S, were found to have positive, moderate associations. The remainder of the POI scales demonstrated positive, weak correspondence with expert power. Perceptions of referent power and all POI scales demonstrated a weak association.

Conclusions: First, due to the small sample size ($N=33$), there is a high probability that not enough statistical power existed to detect significant relationships. Second, French and Raven's (1959) conceptual framework of power as operationalized by the RLPI may not have been the most appropriate variable to correlate with the constructs of self-actualization and emotional development as operationalized by the POI and DRI respectively. There may be a more appropriate instrument to assess interpersonal influence and its relationship to attributes of self-actualization and developmental levels.

Moderate, positive associations were discovered between perceptions of expert power and four of the self-actualizing values. As perceptions of expert power increase so do the attributes of Inner-directedness (I), Self-actualizing value (SAV), Feeling reactivity (F), and Spontaneity (S). Perceptions of referent

power and all self-actualizing attributes demonstrated weaker correspondence in comparison to expert power. This finding highlights the need to study the concept of expert power in more detail. Based on the four POI scales that demonstrated a moderate correspondence, outdoor leaders who are perceived as having a strong expert power base show a greater reactivity orientation towards the self. They are more spontaneous to be themselves and are responsive to their own personal needs and feelings.

Recommendations: The RLPI was developed to assess a subordinate's perception of his or her supervisor's bases of power. Current definitions of expert and referent power found in this study are limited to traditional views of expertise and charismatic attributes. In particular, the concept of referent power could be expanded to capture personality characteristics found in self-actualizing individuals and individuals exhibiting higher developmental functions. Referent power could take on a broader meaning which entails the concepts of: Time Competency and organized multilevel disintegration found at level III of emotional development. Therefore, other instruments would have to be found or created to assess a broader view of referent power based on a developmental perspective.

More research should be conducted to further observe the relationship between expert power and self-actualizing values associated with Inner-directedness. How does the perception of possessing skills and knowledge as an expert relate to being more Inner-directed as opposed to other directed? The psychological constructs of self-confidence or self-esteem should be assessed in conjunction with expert power. This type of research would be beneficial in promoting the development of leader expertise beyond simple technical skill acquisition. Developing leader expertise would also translate into intrapersonal skill development necessary to be a good leader.

Research Question 2: What is the relationship between the Dabrowskian developmental levels and each of the 12 POI scale scores?

Summary of Results: Pearson r 's were computed for analysis of correspondence between Dabrowskian developmental levels and the 12 POI scale scores. Weak correspondence was found between developmental level scores and all 12 POI scores.

Conclusions: High correspondence was expected between the DRI index of developmental level and the assessment of self-actualization as measured by the POI. Beach (1980) reported high correspondences on 8 of the 12 POI scales, (Tc, I, SAV, Ex, Fr, Sa, A, and C) in a sample of 51 women with a reported developmental level of 1.93. Beach presented the possibility that the correspondence she found between POI and DRI measures may have reflected a consistency of score relationships expected for DRI indices indicating development at level II.

Several explanations may account for the discrepancy found between this study and Beach's work. First and foremost, the sample size of outdoor leaders (N=33) is small and could have biased the outcome. Second, the mean developmental level reported for the sample of outdoor leaders was 2.22. N.B. Miller (personal communication, April 11, 1997) recommended the following breakdown in order to create more meaningful categories for ease of interpretation:

- 1.76 - 1.99 Significantly more level II characteristics than level I
- 2.00 - 2.24 Consistently functioning at level II
- 2.25 - 2.49 Level II characteristics begin to weaken in favor of level III
- 2.50 - 2.74 More level III characteristics than level II characteristics
- 2.75 - 3.00 Significantly more level III characteristics than level II

Miller's recommended breakdown corresponds somewhat to Lysy's (1979) work which identified an index between 1.6 and 2.5 as an indication of development at level II. Lysy went on to say that a developmental level index of 2.5 could be seen as an estimate of potential for vertical, development in the direction of self-actualization. The difference in developmental level between Beach's sample and the sample of outdoor leaders may explain the lack of high correlations between the DRI indices and POI scale scores found in this study.

As individuals move closer to spontaneous multilevel disintegration at level III characterized by a deepening inner struggle, the POI scores in this study did not correspond by demonstrating any type of significant relationship.

Weckowicz (1988) made mention that self-actualization may occur at lower levels of development due to socialization, inherited endowment and growth potential. The possibility exists that the POI is an appropriate instrument to detect attributes of self-actualization at lower levels of development. This could be partly explained if the developmental level of the original POI norming sample could be determined. Based on the general belief that most of the general population functions at lower levels, substantiates this assumption.

Recommendations: Further investigations are needed to compare DRI and POI measures for sample groups indexed at different developmental levels. As recommended by Beach (1980), the POI should be administered to a sample group that is indexed at level IV. Although, identifying and accessing a population of level IV individuals would be extremely problematic based on the small number of these subjects found in the general population.

Another recommendation that may broaden the utility of developmental levels as an assessment tool includes N.B. Miller's (personal communication, April 11, 1997) and Lysy's (1979) interpretation of developmental level scores. Miller and Lysy provide a more finite assessment of emotional development by

interpreting scores on a more detailed continuum. This approach tends to give clearer meaning to measurements obtained from the DRI. For example if the instrument were to be used as a diagnostic tool in a counseling or training context, interpretation would be easier and more meaningful for the client. Therefore, more research needs to be done by comparing individuals who vary within the developmental levels to determine significant and meaningful differences.

Research Question 3: What is the effect of chronological age on (a) the primary POI scales of Time Competence (Tc) and Inner-directed (I), (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

Summary of Results: The self-actualizing attribute of Time Competency compared to an outdoor leader's age produced no significant relationship. But, a difference was discovered between the self-actualizing attribute of Inner-directedness and an outdoor leader's age. The results showed that as the outdoor leader's age increased so did the attribute of Inner-directedness.

An outdoor leader's age and her/his developmental level showed no significant relationship. No significant findings were found between co-leader's perceptions of referent power and age. A significant relationship resulted when comparing perceptions of expert power with age. The youngest group of leaders was perceived by co-leaders as having weaker expert power bases. While, the middle and older aged groups were both perceived as having stronger expert power bases.

Conclusions: Time Competency (Tc) and Inner-directed (I) were both expected to show a relationship to age as found in prior studies (Knapp, 1990). Tc showed no relationship while differences in I scale scores were found

between all three age groups. Again the small sample size and lack of power may account for this discrepancy. In other words, the ANOVA F-statistic could have been biased. Higher Inner-directed scale scores demonstrate that an individual's reactivity orientation is basically towards self as opposed to others. This finding verifies other studies that have produced the same results. As an outdoor leader's age increases there is also an increase in the self-actualizing attribute of Inner-directedness.

Age showed no significant relationship with developmental levels as suspected. This may support the postulate that within the "Theory of Emotional Development", development is measured in terms of restructuring the underlying affective and cognitive organization without the influence of chronological ageing.

When comparing power bases with age, no relationship was found between age and referent power. Therefore, one assumption might be that the referent power scale does assess personality characteristics that transcends the demographic variable of age. The significant relationship between age and expert power may support the notion that perceptions of expertise do not transcend demographic characteristics such as age. This finding further links the concepts of Inner-directedness and expert power through the maturation process of age.

Recommendations: Additional studies should be conducted to determine clearer definitions and descriptive attributes of expert versus referent power. While expert and referent power bases may be qualitatively different from reward, coercive and legitimate power (Student, 1968), serious consideration might be given to further separating referent and expert power. Expert power appears to be influenced by characteristics unique to itself and should not be characterized as an idiosyncratic construct along with referent power. The

possibility also exists that perceptions of expert power are more prone to cultural biases perpetuated by the human socialization process. A potential research question to address this might be, "what specific factors influence varying perceptions of expert power within a specific cultural context?"

Research Question 4: What is the effect of work experience as an outdoor leader on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

Summary of Results: The amount of outdoor leader work experience when compared to the attribute of Time Competency demonstrated no significant relationship. A significant relationship was found when comparing Inner-directedness with the amount of work experience accumulated by an outdoor leader. Outdoor leaders who have worked 13 to 24 months in this study appear to be less Inner-directed than outdoor leaders who have worked for more than two years.

An outdoor leader's work experience and her/his developmental level showed no significant relationship. No significant findings were found between co-leaders' perceptions of referent power and work experience. A significant relationship resulted when comparing perceived expert power with work experience. As outdoor leaders gain work experience, co-leaders' perceptions of expert power also increase.

Conclusions: Comparisons of work experience to DRI indices, POI scale scores and power scores result in similar conclusions found in research question 3. One difference was that the Inner-directed POI scale showed a significant relationship between the middle work experience group and the group with the most work experience. There is a significant difference in the attribute of Inner-directedness between outdoor leaders who work 13 to 24

months and outdoor leaders who have worked more than 24 months. The fact that no significant difference was found between the group with the least work experience (2 to 12 months) and the other two groups raises suspicion. Due to the small sample sizes of each group, there is a higher probability that the F-statistic is biased.

As with age, work experience does not demonstrate a significant relationship with an outdoor leader's developmental level. However, the same conclusions can be made with regard to age and work experience when compared to power bases. Referent power demonstrated no relationship, whereas, expert power showed significant relationships between all three work experience groups. Based on the findings of this study, the possibility exists that the quantity of work experience directly influences the co-leader relationship due to the increase in perceptions of expert power.

Recommendations: The recommendations for question four parallels those of question three due to similar characteristics and findings. Work experience proved to be significant as did chronological age when comparing it to the Inner-directed POI scale and expert power scale. This finding reinforces the recommendation that expert power be reanalyzed in future studies to determine what characteristics formulate a co-leader's perception of expert power. The results reinforce a common perception that an individual's degree of expertise increases as work experience increases. This further supports the notion that referent and expert power occupy two different domains as opposed to only a personality orientation. Further questions are also raised by the new evidence that some type of relationship may exist between Inner-directedness and perceptions of expert power. For example, "Are self-directed individuals perceived as experts?" The answer to this question may help develop a deeper understanding of perceptions of expert power.

Research Question 5: What is the effect of level of education on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

Summary of Results: An analysis of Time Competence with educational level and Inner-directedness with educational level produced no significant relationships. An outdoor leader's level of educational and developmental level showed no significant relationship. No significant findings were found between perceptions of referent power and educational level. A significant finding resulted when comparing perceptions of expert power with educational level. Undergraduate outdoor leaders are perceived to have a weaker expert power base than outdoor leaders who are graduate students or hold master degrees.

Conclusions: In conjunction with other research findings, educational level was hypothesized to demonstrate a relationship between both the Tc and I scale scores. Where age and educational level showed a significant relationship with I scale scores, educational level did not. To project a possible explanation would be difficult based on the small sample size. As with the other demographic variables, educational level demonstrated no significant relationship to developmental level.

Once again, the findings of educational level in relationship to power are strikingly similar to the previously discussed findings found in research questions three and four. Referent power demonstrated no significant relationship while expert power did. Educational level, as with age and work experience, falls into a similar pattern to reinforce prior conclusions and recommendations to redefine expert power. Education is another potential attribute which could be seen among outdoor leaders as a determining factor influencing co-leaders' perceptions of expert power.

Recommendations: The recommendations for research question five match that of those recommendations given for research questions three and four. Expert power and educational level may be significantly linked based on a culturally encapsulated view of expert power. The cohort for this study all actively participated in the institution of higher education and therefore may have associated their value of higher education with expertise. More studies should be conducted to assess the relationship between perceptions of expert power and educational level. As expert power plays out to be a potentially significant power base influenced by age, work experience and educational level, research needs to be conducted to determine how expert power actually affects co-leader relationships compared to other types of power.

Research Question 6: What is the effect of gender on (a) the primary POI scale scores of Tc and I, (b) Dabrowskian developmental levels and (c) perceptions of expert and referent power?

Summary of Results: Analyses of Time Competence with gender and Inner-directedness with gender produced a nonsignificant finding. An analyses of male and female outdoor leaders and developmental level also showed no significant relationship. No significant relationship was found between referent power and gender. Also, no significant relationship was found between expert power with gender.

Conclusions: As hypothesized, gender produced no significant relationships with all variables assessed. Findings of no significant relationship between gender and POI scores correspond to studies cited by Knapp (1990). Therefore, an outdoor leader's self-actualizing attributes of Tc and I appeared to be similar to other populations.

No relationship was hypothesized between the developmental levels of males and females which further supports the theoretical underpinnings of the “Theory of Emotional Development” as a gender neutral model. As expected, no significant relationship was discovered between the male and female power scores. Therefore, the developmental levels of males and female outdoor leaders used in this study appeared to be similar.

Little information exists on the potential gender bias of the RLPI. This study potentially provides some evidence that the RLPI is not gender specific when assessing expert and referent power bases. As a reminder, the revised questions developed to assess expert and referent power among the sample listed the co-leader's name throughout the instrument. There is a possibility that this design could have influenced the results by listing the name and not utilizing a pronoun as found in the original RLPI. At this point, there is not enough information to speculate in any certain direction. Sample sizes for males and females, 16 and 17 respectively, were larger than the previous sample sizes used to analyze age, work experience and educational level with power. The gender sample sizes were closer to a recommended minimum size of 12 subjects per cell (Keppel, 1991) to increase sample normality. The results of this study showed no significant relationship between male and female power scores. Therefore, co-leader's perceptions of expert and referent power did not differ between male and female outdoor leaders.

Recommendations: Additional studies should be conducted to assess the gender bias of the RLPI as well as the revised questions used in this study. Power and gender compose a fascinating research topic for future study within the context of leadership. Expert and referent power indices have already been linked to job satisfaction, behavioral and attitudinal compliance in the work place. More research could be conducted to further assess the relationship of

expert and referent power to co-leader relationships according to gender. The mean developmental level (2.22) of this sample could also have influenced perceptions of female and male power. More studies should be conducted to see if the developmental level of a group influences perceptions of male and female power bases.

Implications

Assessing levels of emotional development and attributes of self-actualization could prove to be beneficial in the training and development of outdoor leaders. Emotional development as operationalized by the DRI provides rich information as a way of analyzing behaviors and value orientation. Developing a leader's "soft skills" presents a challenging task that holds no clear methodology as opposed to technical skill or "hard skill" development. Self-awareness may be the psychological construct that allows leaders to access the interpersonal skills necessary to develop competent "soft skills". If self-awareness is defined within the context of emotional development characterized by the attributes of self-actualization, trainers of outdoor leaders have a reference to formulate specific goals for "soft skill" improvement based on the developmental level of the trainees.

The following hypothetical situation provides an example situation by demonstrating how self-awareness enhancement might help. An outdoor leader in training, Pat, functions at level 2.26 and shows signs that level II characteristics are beginning to weaken in favor of level III. Pat demonstrates occasional emotional struggles in the form of self-doubt and frustration as she co-leads her groups. Pat continues to be influenced by how her co-leaders perceive her and finds herself seeking solitude to avoid normal peer interactions. Her co-instructors begin to struggle with her behavior and interpret

the actions as negative. During a monthly staff training, a consultant is brought in who facilitates a two-day workshop on the “soft skills” of leadership. During the process, Pat and the other staff members self-assess and contemplate their behaviors based on their new knowledge of emotional development. To Pat's relief, their new knowledge explains their feelings and behaviors and allows for a productive shift in their relationships.

The above simplified example, using Pat, demonstrates the implications of pursuing the construct of leader self-awareness within the context of emotional development. Dabrowski (1967) believed that inner-conflict, sadness, anxiety, obsession, depression, and psychic tension all cooperate in the promotion of humanistic development. This behavior can be easily misinterpreted and present real barriers in the process of leadership development. Understanding and acknowledging this natural process has implications for “soft skill” development among leaders. If outdoor programs support the growth and development of outdoor leaders, these programs must be able to contend with and help direct emotional development. Organizations that focus on leadership development cannot avoid this issue if they hope to develop well-rounded, quality outdoor leaders.

The assumption is that outdoor organizations, co-instructor relationships and groups would all benefit from leaders who are operating at higher levels of emotional development. This study did not find a significant relationship between levels of development and and perceptions of influence (power). Yet, additional research needs to be conducted to determine what relationship a leader's development has to do with his or her influence among co-leader relationships. This research needs to be expanded to also determine a leader's developmental level and its relationship to the groups she or he leads.

The construct of power also deserves more attention as an important variable when studying outdoor leadership. French and Raven's (1959) view of power operationalized by the Rahim Leader Power Inventory (RLPI) did produce thought provoking results even though the small sample size rendered the results inconclusive. The revised instrument used in this study could be used (with Dr. Rahim permission) to assess the power indices within a large staff of outdoor leaders should power issues be a suspected problem. Using the tool could be a method to raise awareness and stimulate discussion. More research needs to be conducted to see if outdoor leaders perceive peers as experts based on age, work experience and educational level. This knowledge could also be helpful in raising the awareness that hierarchies do exist and may help explain staffing patterns, organizational culture and staff relationships.

The findings of this study have ramifications for Winter's (1976) model of co-leader roles and concerns. Evidence was found to support the notion that co-leaders perceived each other as experts based on age, level of education and work experience. More research needs to be conducted to determine the exact effect of a strong expert power base within the co-leader relationship. For example two questions to ask might be; (1) are the working relationships more satisfying when there are perceptions of a strong co-leader expert power base or, (2) do higher levels of leader expert power expedite group development? As recommended in this study, clarifying the definition and characteristics of expert power would further our understanding of co-leader relationships and group development.

Power and its relationship to gender in this study also deserves attention. No significant difference between men and women and perceptions of power has fascinating implications. Power and gender compose contemporary issues that permeate all professions including the adventure education. This study

provided some evidence that perceptions of power were equal among women and men in this study. Anecdotal comments made to the researcher by the subjects provided some insight. Several subjects shared that gender equity is modeled and taught within the organizational structure. The administrator's expectations applied to all employees equally and infractions of disrespect for the opposite sex were confronted by the administration. This organizational norm was instilled during initial training and continued throughout employment. A research question to pursue based on this implication might be, "Does the management of an organization have direct influence over the perceptions of power between men and women co-workers?"

There is also a possibility that the mean developmental level of the entire sample attributed no differences in perceptions of power between male and female outdoor leaders. As level II structures breakdown and level III characteristics develop, perceptions of power between males and females becomes less dichotomous. More research should be conducted to determine the developmental levels of other populations of outdoor leaders. Based on past research utilizing the DRI, this sample scored slightly above the average developmental level of the general population. This finding inspires such questions as: (1) What type of individuals are attracted to leadership positions within the adventure education profession?; (2) Do individuals experience developmental change as a result of their experiences and training within the adventure education profession?; (3) Do challenge course leaders differ from other adventure leader populations such as mountain guides, raft guides, camp counselors, environmental educators or instructors of a large outdoor leadership schools?; and, (4) How do other groups functioning at different developmental levels influence perceptions of power between male and female

co-workers. Expanding this study would answer such questions and stimulate others.

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APPENDIX A
DEFINITION RESPONSE INVENTORY

Definition Response Instrument

(adapted from Gage, Morse, Piechowski, 1981)

1. Please describe times when you are strongly affected by what others think of you or times you have compared yourself in some way to others.
2. Please describe those questions which cause strong doubts within you, that frustrate you, and perhaps result in anxiety or depression. The problems should involve struggles which are internal (for example, philosophical, sexual, emotional), not struggles which are primarily external (for example, a purely economic problem).
3. Describe times when you feel inadequate, unworthy, not good enough, or frustrated with what may be lacking in yourself (abilities, skills talents, personal qualities, etc.).
4. Describe those situations which cause you to feel frustration or anger toward yourself. Such feelings may stem from something you did and later regretted, as well as something you feel you should have done, but did not do. Likewise, you may be angry with yourself for having felt a certain way of having believed something you no longer feel is true.
5. Think of times when you try to stand back and look at yourself objectively. Upon what specific things do you reflect? Please elaborate.
6. Think of your "ideal self" and those qualities that you think are best for an ideal life. What attributes do you most dream of having?

APPENDIX B
DEFINITION RESPONSE INVENTORY SUB-CATEGORIES

CATEGORY CODING SYSTEM DIAGRAM

Feelings Toward Others	Feelings Toward Self	Feelings Toward Values
Superficial	Egocentricity	Self-Serving
Adaptive	Ambivalence	Stereotypical
Interdependent	Inner Conflict	Individual
Democratic	Self-Direction	Universal
Communionistic	Inner Peace and Harmony	Transcendent

Taken from:

*Miller Assessment Coding System: Manual for Rating Levels of
Emotional Development*

Dr. Nancy B. Miller
Department of Sociology
University of Akron
Akron, Ohio 44325-1905

Revised June 1991

APPENDIX C
REVISED RAHIM LEADER POWER INVENTORY

Confidential

Karen Example

I am interested in your opinion about your co-instructor (full name written above) and your relationship with him or her. Please indicate, by circling a number on the scale provided, the extent to which of the following statements describes your opinion. Your responses will be held in **strict confidence** by the researcher. I would appreciate your honest and candid opinion.

Scale: 5 = *Strongly agree*, 4 = *Agree*, 3 = *Undecided*, 2 = *Disagree*, 1 = *Strongly Disagree*

- | | |
|--|-----------|
| 1. Karen has a pleasing personality. | 5 4 3 2 1 |
| 2. When a tough situation comes up Karen has the technical "know how" to get it done. | 5 4 3 2 1 |
| 3. Karen has specialized training in challenge course instruction. | 5 4 3 2 1 |
| 4. I <i>don't</i> want to identify myself with Karen. | 5 4 3 2 1 |
| 5. I prefer to do what Karen suggests because she has high professional expertise. | 5 4 3 2 1 |
| 6. Karen has considerable professional experience to draw from in helping me do my work. | 5 4 3 2 1 |
| 7. I admire Karen because she treats every person fairly. | 5 4 3 2 1 |
| 8. I like the personal qualities of Karen. | 5 4 3 2 1 |
| 9. I approach Karen for advice on work-related problems because she is usually right. | 5 4 3 2 1 |
| 10. I want to develop a good interpersonal relationship between Karen. | 5 4 3 2 1 |
| 11. Karen is <i>not</i> the type of person I enjoy working with. | 5 4 3 2 1 |
| 12. Karen does <i>not</i> have the expert knowledge to help me perform my job. | 5 4 3 2 1 |

APPENDIX D
ORIGINAL RAHIM LEADER POWER INVENTORY
(Copy provided by Dr. M.A. Rahim)
212 Grise Hall
Western Kentucky University
Bowling Green, KY 42101

Confidential

1. We are interested in your *opinion* about your superior (i.e., immediate supervisor) and your relationship with him (her). Please indicate, by circling a number on the scale provided, the extent to which each of the following statements describes your opinion. Your responses will be held in *strict confidence* by the researchers. We would appreciate your candid opinion.

Scale: 5 = *Strongly Agree*, 4 = *Agree*, 3 = *Undecided*, 2 = *Disagree*, 1 = *Strongly Disagree*

- | | | | | | |
|--|---|---|---|---|---|
| 1. My superior has a pleasing personality. | 5 | 4 | 3 | 2 | 1 |
| 2. My superior can take disciplinary action against me for insubordination. | 5 | 4 | 3 | 2 | 1 |
| 3. I approach my superior for advice on work-related problems because she (he) is usually right. | 5 | 4 | 3 | 2 | 1 |
| 4. My superior can recommend me for a merit recognition if my performance is especially good. | 5 | 4 | 3 | 2 | 1 |
| 5. When a tough job comes up my superior has the technical "know how" to get it done. | 5 | 4 | 3 | 2 | 1 |
| 6. It is reasonable for my superior to decide what he (she) wants me to do. | 5 | 4 | 3 | 2 | 1 |
| 7. My superior has specialized training in his (her) field. | 5 | 4 | 3 | 2 | 1 |
| 8. My superior is justified in expecting cooperation from me in work-related matters. | 5 | 4 | 3 | 2 | 1 |
| 9. My superior can fire me if my performance is consistently below standards. | 5 | 4 | 3 | 2 | 1 |
| 10. My superior does <i>not</i> have the expert knowledge I need to perform my job. | 5 | 4 | 3 | 2 | 1 |
| 11. My superior can provide opportunities for my advancement if my work is outstanding. | 5 | 4 | 3 | 2 | 1 |
| 12. I <i>don't</i> want to identify myself with my superior. | 5 | 4 | 3 | 2 | 1 |
| 13. My superior's position entitles her (him) to expect support of her (his) policies from me. | 5 | 4 | 3 | 2 | 1 |
| 14. My superior can suspend me if I am habitually late in coming to work. | 5 | 4 | 3 | 2 | 1 |
| 15. My superior <i>cannot</i> get me a pay raise even if I do my job well. | 5 | 4 | 3 | 2 | 1 |
| 16. My superior can see to it that I get no pay raise if my work is unsatisfactory. | 5 | 4 | 3 | 2 | 1 |
| 17. I prefer to do what my superior suggests because he (she) has high professional expertise. | 5 | 4 | 3 | 2 | 1 |
| 18. My superior has considerable professional experience to draw from in helping me to do my work. | 5 | 4 | 3 | 2 | 1 |
| 19. I admire my superior because she (he) treats every person fairly. | 5 | 4 | 3 | 2 | 1 |
| 20. My superior can fire me if I neglect my duties. | 5 | 4 | 3 | 2 | 1 |
| 21. I like the personal qualities of my superior. | 5 | 4 | 3 | 2 | 1 |
| 22. If I put forth extra effort, my superior can take it into consideration to determine my pay raise. | 5 | 4 | 3 | 2 | 1 |
| 23. My superior's position does <i>not</i> give him (her) the authority to change the procedures of my work. | 5 | 4 | 3 | 2 | 1 |
| 24. I want to develop a good interpersonal relationship with my superior. | 5 | 4 | 3 | 2 | 1 |
| 25. My superior is <i>not</i> the type of person I enjoy working with. | 5 | 4 | 3 | 2 | 1 |
| 26. I should do what my superior wants because he (she) is my superior. | 5 | 4 | 3 | 2 | 1 |
| 27. My superior can get me a bonus for earning a good performance rating. | 5 | 4 | 3 | 2 | 1 |
| 28. My superior can recommend a promotion for me if my performance is consistently above average. | 5 | 4 | 3 | 2 | 1 |
| 29. My superior has the right to expect me to carry out her (his) instructions. | 5 | 4 | 3 | 2 | 1 |

APPENDIX E
INSTITUTIONAL REVIEW BOARD PERMISSION

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 09-10-96

IRB#: ED-97-009

Proposal Title: OUTDOOR LEADER SELF-AWARENESS AND ITS
RELATIONSHIP TO CO-INSTRUCTOR'S PERCEPTIONS OF POWER

Principal Investigator(s): Christine Cashel, Mark Wagstaff, Lowell Caneday

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD
AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING
THE APPROVAL PERIOD.

APPROVAL STATUS PERIOD VALID FOR ONE CALENDAR YEAR AFTER WHICH A
CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD
APPROVAL.

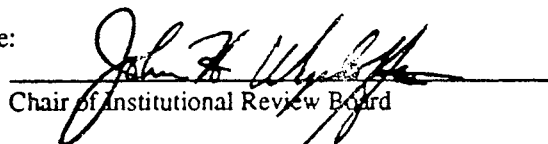
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR
APPROVAL.

Comments, Modifications/Conditions for Approval or Reasons for Deferral or Disapproval
are as follows:

All of the basic criteria for "Exempt" status are clearly met. There is no appreciable risk
involved. The study is thoroughly voluntary with right of withdrawal without penalty.
There will be necessary confidentiality since no names will be used. All participants will be
adults in non-risk classification. The consent form is complete and adequate.

The only suggestion that could be made is the addition of Gay Clarkson's name as IRB
Secretary, OSU University Research Services, 305 Whitehurst.

Signature:


Chair of Institutional Review Board

Date: September 12, 1996

APPENDIX F
LETTER AND DEMOGRAPHIC QUESTIONNAIRE

CHALLENGE BY CHOICE

Dear Challenge Course Instructor:

Thank you for participating in this leadership research project. You may be overwhelmed by the amount of paper, so let me know if you are having second thoughts. I will understand!

I will need your responses by the last week of October, but feel free to return it before then.

You will find three sections to complete. The first two sections will assess aspects of your leadership style. The third survey will require you to assess co-workers you have worked with at least once. All surveys will remain strictly confidential and will in no way be used as an evaluative tool in your work. Once the study is complete, you may request copies of the results. Your participation will help improve our understanding of outdoor leadership and assist in the development and training of outdoor leaders.

Thank You For Your Help,

Mark Wagstaff

PLEASE COMPLETE AND RETURN THE FOLLOWING WITH THE REST OF THIS ENTIRE PACKET:

Your age _____ Gender (circle) Male Female

Number of years working as a challenge course instructor _____

Level of education completed (circle)

High School 1 yr. college 2 yrs. college 3 yrs. of college
4 yrs. of college 5 yrs. college Master Degree Doctorate Degree

APPENDIX G
CONSENT FORM

RESEARCH CONSENT FORM

I _____, hereby authorize or direct Mark Wagstaff to perform the following procedure:

Administer two surveys to assess my leadership and administer a third survey in which I will assess my relationship with my co-workers. I understand that my name will appear on the survey used to assess co-workers. I also understand that all surveys will be kept completely confidential and will not be used in any way to evaluate my work. I realize there may be some discomfort as I assess my co-workers but understand that the information is strictly confidential. I realize that this research will be used to improve leadership development among outdoor education professionals and to improve leadership effectiveness.

I understand that this research project is done as part of an investigation entitled, "Outdoor Leader Self-Awareness and its relationship to co-instructor perceptions of power".

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project director.

I may contact Mark Wagstaff at telephone number (405) 744-5583. I may also contact OSU University Research Services, 001 Life Sciences East, OSU, Stillwater, OK 74078; Telephone (405) 744-5700.

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

Date_____ Time_____ (am/pm)

Signed (Subject)_____

I certify that I have personally explained all elements of this form to the subject or his/her representative before requesting the subject or his/her representative to sign it.

Signed (Project Director)_____

APPENDIX H
SECTION COVERS AND INSTRUCTIONS

FIRST SECTION

FIRST

Please answer the following six questions as honestly as possible. Each question is presented at the tip of a separate sheet of paper. Please spend as much time as you need to complete each question and feel free to use the back of the paper if needed. Remember, all of your answers will be kept confidential. Please do not worry about spelling or perfect grammar and punctuation. There are no right or wrong answers. If you have questions or need clarification, please do not hesitate to call me if you have questions at 405-744-5583

SECOND SECTION

Second

Please answer the following questions as honestly as possible about yourself. Read the directions on the survey booklet carefully. You will find your scan sheet attached as the last page of the booklet. Feel free to remove the scan sheet to make the process easier.

THIRD SECTION

Third

You will find the full name of a challenge course co-instructor at the top right side of the following surveys. If you have worked with the individual listed at the top of the page please complete the survey. If you have not worked with or do not know that person, leave the survey blank. Please be honest and remember that these surveys will be kept in strict confidence.



Mark C. Wagstaff

Candidate for the Degree of

Doctor of Education

Thesis: OUTDOOR LEADER SELF-AWARENESS AND ITS RELATIONSHIP
TO CO-LEADERS' PERCEPTIONS OF INFLUENCE

Major Field: Higher Education

Biographical:

Personal Data: Born in High Point, North Carolina, On February, 26, 1959

Education: Graduated from Lexington Senior High School, Lexington, North Carolina in May of 1977; received Bachelor of Science degree in Parks and Recreation Administration from North Carolina State University, Raleigh, North Carolina in May of 1981. Completed the requirements for a Master of Science degree at North Carolina State University in May of 1988. Completed the requirements for the Doctor of Education with a major in Higher Education at Oklahoma State University, Department of Health, Physical Education and Leisure in July, 1997.

Experience: Professional whitewater guide in North Carolina, Tennessee, South Carolina, Idaho, New York and Costa Rica. Instructor for the Wilderness Education Association since 1985. Instructor for the North Carolina Outward Bound School in 1988 and 1989. Executive Director of the Wilderness Education Association from 1989 to 1992. Coordinator of the Oklahoma State University Outdoor Recreation program from 1992 to 1997.

Professional Memberships: The Wilderness Education Association, Fort Collins, CO and The Association for Experiential Education, Boulder, CO.