

SITUATIONAL LEADERSHIP AWARENESS DEVELOPMENT IN STUDENT OUTDOOR
LEADERS THROUGH TRAINING VERSUS EXPERIENCE

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ABSTRACT

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This dissertation explores the impact of formal staff training and field leadership on the ability of student leaders to correctly discern the appropriate styles of leadership for specific outdoor recreation-based situations. The relationship between the situational leadership model (Hersey & Blanchard, 1980) and group development theory (Tuckman, 1965) was explored through the integration research of Weber and Karman (1991) and was used as a framework for this study. In order to develop an applicable form of this research for this study, the researcher developed an integrated dynamic model to provide a visual representation of the blending of the two theoretical frameworks. In addition to the exploration of formal staff training and field leadership experiences, analyses were conducted to determine if age, gender, race, previous outdoor recreation experience, or outdoor recreation degree seeking significantly affected the students' awareness or their dominant styles of leadership. The literature study indicated a strong relationship between situational leadership and outdoor recreation (Breunig, O'Connell, Todd, Anderson, & Young, 2010; Shooter, Paisley, & Sibthorp, 2009; Sibthorp, Paisley, & Gookin, 2007; Sutherland & Stroot, 2010), but little, if any, research exists on the development of situational leadership in outdoor leaders. The quantitative nature of this study stemmed from the lack of research in the outdoor recreation field from this approach. As most previous research in outdoor recreation utilized small populations (i.e., a single group of people participating in an outdoor recreation activity), this study examined a larger group of participants utilizing a quantitative approach.

In total, 106 student outdoor leaders from various Midwestern United States university outdoor recreation programs participated in a three-part study that tested their awareness of

situational leadership through the Outdoor Leadership Survey (OLS), which utilized the Expedition Leader Style Analysis (ELSA; Phipps & Phipps, 2003). The survey was administered prior to the formal staff training, at the conclusion of the staff training, and after a minimum of 7 days of field leadership experience.

The results were paired and analyzed for significance. *T* tests of related samples indicated no significant difference in situational leadership awareness scores (SLAS) and the formal staff training or field leadership experience. Though no significant results were found in the study it was noted that the calculations were unable to control for various presentation styles of leadership development information. The varying structure of the formal staff training and field leadership experiences coupled with the low statistical power due to limited data points could have caused non-significant results. In terms of demographic differences, chi-square tests were conducted to examine relationships between dominant leadership styles and the reported variables. Reported *p* values were $> .05$ for all tests, with the exception of the change in dominant leadership style when compared to gender in post-training results, $p = .049$.

Of the many demographic areas studied, gender was the only factor with a significant difference in the dominant leadership style of a student leader and the difference was only seen after the formal staff training. Though the aspects of the formal staff training that caused this difference are currently unknown, the study recommended that directors of outdoor recreation programs examine the content and presentation of material during staff trainings to determine if the training is being presented in such a way that a particular style of leadership is preferred instead of a balanced approach, when related to gender. And finally, although not significant, the effect of prior participation showed a difference in dominant leadership styles compared to the general college student trend from pre-training scores. These results were attributed to the newer staff being more open to various leadership approaches while senior staff had settled on a

particular dominant style that they would use in most situations as a reflection of their formal leadership as a college student (Haber, 2012). The study recommended that those directing programs to continually observe senior staff members to ensure the use of a well-rounded leadership approach based on these findings. In doing so the director can work toward a staff consisting of both new and senior members who all utilize a well-rounded leadership style approach instead of reliance on a single dominant style.

I dedicate this dissertation to my grandfather, John Gabriel, who supported and encouraged me throughout this process yet was unable to see it through to its completion. It was his life and his time with me outdoors when I was a young child that inspired my passion for the outdoors, and through his legacy, I hope to lead others down the same path.

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Advisor and Dissertation Committee

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CHAPTER I. INTRODUCTION

In the field of outdoor leadership, leaders must be able to adjust their leadership styles based on given situations for the safety and enjoyment of the participants. Because of the importance of adjusting leadership styles, it is necessary to understand the development of such a skill. The researcher in this study sought to understand the difference in the development of this skill during the formal training setting and formal outdoor leadership. The researcher also explored whether the dominant leadership styles of outdoor leaders change during the formal staff training and field leadership processes and whether gender plays a role in dominant styles.

Problem Statement

Outdoor education provides students with opportunities to develop leadership and practical skills in the areas of communication, group behavior, judgment, technical skills, and environmental awareness (Sibthorp, Paisely, & Gookin, 2007). These developed skills combine to create leaders who are capable of creating risk-managed and developmentally appropriate environments for participants. Research about the outdoor experience setting has shown that leaders' inabilities to appropriately change styles based on changing situations in the outdoor environment has a negative impact (Sutherland & Stroot, 2010). Leaders must be able to not only recognize when situations have changed, but also appropriately adjust their leadership styles (Sutherland & Stroot, 2010). Although the importance of this understanding is well documented, the research supporting how this understanding occurs is lacking in the literature.

On May 10, 1996, Scott Fischer, an experienced mountaineering guide, led an expedition up Mount Everest, and his assistant, Neil Beidleman, accompanied him on the journey. Roberto and Carioggia (2003) described the events that transpired on this day. They documented that although Fischer had significant training and experience on Everest, Beidleman did not. On May 10, during the descent from the summit, an unusually strong winter storm hit the mountain,

creating a situation that was unfamiliar to the guide and one for which Beidleman lacked training and experience. Fischer became disoriented due to exhaustion and the physical ailments he suffered from the altitude. Fischer's condition caused him to make poor decisions, leading to the deaths of multiple individuals. During the period of Fischer's disorientation, Beidleman had reservations about Fischer's decisions based on the situation and skill level of the group. However, due to his lower level of leadership and experience, he chose not to make any decisions regarding the group's progress for fear of usurping the command of the expedition. If Beidleman had possessed a better understanding of the situation and skill level of the group through more formalized training or experience and had varied his leadership style to match the situation, many lives could have been saved. This case study highlights the importance of a solid understanding of situational leadership for outdoor leaders to ensure the safety of their participants. It is essential to understand the development of situational leadership in order to create outdoor leaders who can and will appropriately respond to situations in which incorrect or absent action could lead to tragedy.

Rationale

Researchers have identified 12 outdoor leadership elements necessary for outdoor leaders, including flexible leadership style, experience-based judgment, and effective communication and facilitation skills (Buell, 1981; Green, 1981; Priest, 1984, 1986; Raiola, 1986; Swiderski, 1981). To effectively apply these skills in the outdoor setting, leaders must be able to balance them appropriately based on changes in the situation (Blanchard & Hersey, 1970). Research has supported the importance of situational leadership awareness as an outdoor leadership skill (Priest, 1984; Sibthorp et al., 2007; Sutherland & Stroot, 2010); however, this research has focused on qualitative observation of situational leadership. No research has been conducted on the development of situational leadership awareness, specifically through

quantitative measurement. In the field of outdoor leadership, leaders must be able to judge situations and choose appropriate styles of leadership (Blanchard & Hersey, 1970). The lack of research on the development of situational leadership awareness leaves a gap that if researched, would allow for a better understanding of the training and development processes of outdoor leaders. The lack of data has led researchers to state that

Since it is well accepted in the outdoor field that skill improvement comes with experience, a next step in researching this topic would be to not only do a pre- and post-test before and after staff training, but to also follow up with testing of the same leaders after one to two months spent in the field. (MacAvoy, Roehl, & Rynders, 2002, p. 53)

This study answered the call for research through an investigation of the pre- and post-training awareness of situational leadership as well as a post-field-leadership examination. Medina (2001) wrote, “In order to advance the field of adventure programming, research should continue to examine the quality and applicability of outdoor leadership preparation experiences (p. 151).” Situational leadership awareness is an important skill for outdoor leaders, and researchers have determined the necessity of researching its development (McAvoy et al., 2002). Skill development for outdoor leaders may come from a number of sources; however, the two most significant areas for development are during formal staff training and field leadership (Priest & Gass, 1997).

The situational leadership theory created by Blanchard and Hersey and the group development theory created by Tuckman are closely linked in the study of outdoor leadership (Bonebright, 2010; Dixel, Martin, Black, & Yoshino, 2010; Sibthorp et al., 2007). The purpose of situational leadership is to adjust one’s leadership style based on changes in the situation

(Blanchard & Hersey, 1970). Research has shown a strong connection between the changes in a group's development and an appropriate change in leadership style (Bonebright, 2010; Dexel et al., 2010; Sibthorp et al., 2007). The combination of these two theories allows researchers to focus on the development of leadership awareness for outdoor leaders that can be tested with the Expedition Leader Style Assessment (ELSA) for both awareness and dominant styles (M. Phipps & C. Phipps, personal communication, March 25, 2013). This fulfills not only the research goals presented by McAvoy et al. (2002), but also the desire put forth in research by Priest (1988), who argued that there is a need to understand the theoretical framework and practical skills while developing outdoor leaders.

In addition to providing an understanding the development of the individual leader, the researcher aimed to understand the differences in development regarding demographics. Outdoor recreation is marked by a change in the demographics of those who participate and, in turn, those who lead. In recent years, there has been a significant increase in the number of women participating in outdoor recreation activities when compared to the early and mid-1990s (Attarian, 2001). Research has also shown differences in how women view the natural environment in terms of experience when compared to men. According to Cordell and Tarrant (2002), women tend to showcase a greater awareness and connection with environmental issues than men do. With the shift in gender participation and the accompanying changes in perception, it is necessary to understand if gender differences exist in the leadership styles of men and women, which could lead to changes in the way in which their leadership is presented to clientele.

Beyond gender, there has been a significant shift in the ethnic demographics of many outdoor recreational areas in the United States. Cordell and Tarrant (2002) noted that a powerful

change in the population of racial and ethnic groups, including an increase in Hispanics and a decrease in the non-Hispanic White population, has led to a change in the perception of natural resource management and outdoor recreation. Not only has there been a visible shift in racial and ethnic populations, but these populations have also shown differing values regarding the natural environment. While non-Hispanic Whites tend to rate natural areas as important for scenic value, Hispanic and other non-White racial and ethnic groups tend to view the natural world as a resource or commodity (Cordell & Tarrant, 2002). With a shift in demographics, an understanding of the leadership of these groups could give better insight into the connections between differing racial or ethnic backgrounds and involvement in outdoor recreation.

Purpose of Study

The purpose of this study was to investigate the differences in situational leadership awareness development of college students who participated in formal staff training and those who participated in field leadership. The sample included leaders of self-selecting outdoor programs who were members of the Association of Outdoor Recreation and Education (AORE). These student leaders completed the Outdoor Leadership Survey (OLS) prior to formal staff training, after staff training, and after 7 days of field leadership. Formal staff training was defined as an organized training time created by a professional seeking to develop skills and abilities for student leaders to allow them to lead outdoor expeditions. Field leadership was defined as an experience in which the student, alone or with another student leader, was placed in charge of the outdoor activities and well-being of a group of participants for the day without the guidance of a professional staff member. The OLS asked participants to respond to 12 outdoor situations and four differing leadership options based on the situational leadership model created by Blanchard and Hersey (Phipps & Phipps, 2003).

Research Questions

This study addressed the following research questions:

1. Is field leadership more effective than formal staff training in creating situational leadership awareness?
2. Is formal staff training effective in changing the most significant style of situational leadership in a student leader?
3. What are the major demographic influences on the dominant style of leadership for student outdoor leaders?

Significance of Study

Through the research conducted during this study, the field of outdoor leadership gained a significant amount of knowledge that can help to improve and further develop outdoor leadership training and field leadership programs. Improvements and developments may include adding a more realistic field leadership element to training, increasing the amount of initial field leadership for new leaders, increasing the duration and frequency of trainings, and increasing the amount of time before student leaders can assume full leadership roles in the field. Such improvements can have a direct impact on the development of student leaders and their student participants, creating positive, safe environments for participant growth (MacAvoy et al., 2002). The research results may also allow for changes in training not related to situational leadership in order to develop the most well-rounded outdoor leaders in the most effective manner.

Theoretical Frameworks of the Study

Two major theoretical frameworks guided this study—the situational leadership theory created by Blanchard and Hersey (1970) and the group development theory created by Tuckman (1965). In the situational leadership model, there is a balance between task-related leadership and relational leadership. This balance creates four distinct leadership styles: high task, low

relational; high task, high relational; low task, high relational; and low task, low relational.

These four styles, named Telling, Selling, Participating, and Delegating (Blanchard & Hersey, 1970), correspond to Tuckman's four distinct stages of the group development process. The first stage of Tuckman's group development process is Forming, which refers to a time when the group focuses on a leader for direction and has little concern for interpersonal development. The second stage of this model is Storming, characterized by individual group members striving to find their places within the structure of the group. Storming often involves conflict behaviors. The third stage is Norming, in which individual group members understand their roles within the group structure and recognize others' roles. The fourth stage, Performing, refers to a time when the group becomes more self-sufficient and can make decisions and carry on tasks effectively without much input from a leader. Research has combined these two theories to align the appropriate leadership style with the appropriate group development situation and create the pairings of

Telling-Forming, Selling-Storming, Participating-Norming, and Delegating-Performing (Weber & Karman, 1991). The combination of theories allowed the researcher of this study to use a data-derived framework during testing to determine if student leaders develop a greater awareness of situational leadership through formal training or field leadership.

Definitions of Key Terms

In order to properly understand the context of this research, it was necessary to define key terms prior to examining them in the research and utilizing them in the data analysis.

Situational Leadership: Based on the research of Blanchard and Hersey (1970), this leadership theory balances the task-based and relationship-based directives of leadership with the four main categories of Telling (high task, low relational); Selling (high task, high relational); Participating (low task, high relational); and Delegating (low task, low relational).

Task-Based Leadership: A dimension of leadership that focuses on giving direction and information in order to complete a given assignment.

Relational-Based Leadership: A dimension of leadership that focuses on developing interpersonal interactions between the leader and the follower and between the followers themselves.

Telling: A style that utilizes lower levels of relational leadership behaviors with a higher levels of directional leadership behaviors. This leadership style is most often used in situations with groups of people who lack in experience and direction.

Selling: A style characterized by high levels of both relational and directional leadership behaviors. This style is most often used in situations with highly motivated groups of individuals who do not possess the skills to work independently.

Participating: A style with a high degree of relational leadership behaviors but low levels of directional leadership behaviors. This style is most effective with groups of people who are highly skilled but lack the motivation to complete tasks.

Delegating: A style characterized by both low relational and low directional leadership behaviors. This style is most effective for groups of highly motivated and skilled individuals who only need a leader in a maintenance capacity.

Group Development Theory: Based on the research of Tuckman (1965), this theory maintains that the development of a group of individuals who spend a significant amount of time together is broken down into four stages: Forming, Storming, Norming, and Performing.

Forming: A stage characterized by a lack of motivation and skill with heavy reliance on a person in a leadership role to provide direction.

Storming: A stage that is apparent when a group begins to develop skills and create hierarchies.

Infighting can begin to occur as the group begins to rebel against the leadership.

Norming: A stage characterized by behaviors in which individuals begin to accept their roles within the group based on the skills or abilities they add.

Performing: The final stage in the process in which the group's behaviors becomes self-sufficient based on the internal skill and motivation that the group possesses.

Formal Staff Training: A structured developmental instructional period organized by college or university professionals to teach and refine outdoor-based skills for student leaders.

Field Leadership: A period of time when the student leader is, alone or with another student leader, put in charge of the outdoor activities and well-being of a group of participants for the given time without the guidance of a professional staff member.

Dominant Leadership Style: One of the four leadership styles that Blanchard and Hersey (1970) defined (i.e., Telling, Selling, Participating, and Delegating) that is most frequently chosen by a student respondent as the appropriate style a given situation.

Delimitations and Limitations

Some of the delimitations of this study reside in the complexity of the field of outdoor leadership, there are many components that are part of an effective outdoor leader. Technical skills include land navigation, backcountry cooking, and Wilderness First Aid. Interpersonal skills include conflict management, crisis management, and situational leadership awareness. Because of the number of interacting skills required of outdoor leaders, it was not possible, nor desirable to research all of them in this study. Rather, this study explored only the skill of situational leadership awareness.

Beyond the inability to study all elements of outdoor leadership, this study was limited by the fact that it could not control for the type of training or outdoor experience that the outdoor

leaders led. For example, a significant difference could have occurred between a student leader who led 7 days worth of single-day hiking trips or a student leader who led a 7-consecutive-day backpacking trip. This limitation can affect the generalization of the study to all outdoor leaders. Another limitation was the use of self-reported sample data through an online survey. There was no way to determine if participants had assistance or guidance while completing the online surveys. Several limitations are present as a result of the studied sample. The sample was recruited through AORE. Although the association represents a diverse geographical spectrum of leaders, the leaders are not a racially or ethnically diverse population. Finally, although the data were collected using an online survey instrument, it was collected through an unstandardized method of individual program directors indicating when their staff members would take the online surveys, which could have led to student staff members taking the surveys at differing times instead of the standardized times that were indicated to the program directors.

CHAPTER II. REVIEW OF THE LITERATURE

Leadership in the outdoor setting requires a variety of skills, including the ability to understand the development of a group and the situational context of the setting in which the group is participating (Sutherland & Stroot, 2010). The models used in researching the outdoor experience have been developed over a number of years, and the theories that support them have been backed by Priest's (1984, 1986, 1988) long-term research of general outdoor leadership. More modern researchers, such as Sibthorp et al. (2007) and Sutherland and Stroot (2010), have directly applied these theories to the role of the outdoor leader. This chapter reviews the history of outdoor leadership development, the development and application of two theories in the field of outdoor leadership, and gender in outdoor leadership. In addition, it examines the situational context presented to the leader and the situation's effect on the developmental process of the group being led in the outdoor experience.

Outdoor Leadership

In the past few decades, the field of outdoor recreation has grown, and with it, the understanding of outdoor leadership has increased. In his research, Priest (1988) argued that there is a need to understand theoretical frameworks and practical skills (e.g., First Aid, stove maintenance, navigation) while developing competent outdoor leaders. In order to determine the overall skills necessary for outdoor leaders, Priest (1987) conducted a meta-analysis of outdoor leadership survey research and identified 12 elements essential to the development of outdoor leaders: technical skills, safety skills, environmental skills, organizational skills, instructional skills, facilitation skills, a flexible leadership style, experience-based judgment, problem-solving skills, decision-making skills, effective communication, and professional ethics (Buell, 1981; Green, 1981; Priest, 1984, 1986; Raiola, 1986; Swiderski, 1981).

Leaders with flexible leadership styles can use different leadership approaches dependent upon situations and the needs of the group. According to Priest and Gass (1997), leaders with experience-based judgment can call upon past experiences, both good and bad, to inform decisions during given situations. The researchers found that experience-based judgment requires that leaders have significant outdoor experiences in leadership roles from which to draw. Effective communication for outdoor leaders, they stated, is the ability of leaders to utilize the appropriate forms of communication based on the situation and the ability of the listeners. Effective communication includes giving clear information and feedback to complete the communication loop. Finally, Priest and Gass found that leaders must possess good facilitation skills, which foster positive group development through helping groups toward task completion while facilitating interpersonal relationship development. In order to facilitate the development of interpersonal relationships, leaders must be able to recognize and understand the feelings, thoughts, and emotions of those they are leading (Schuster, 1979). This skill is referred to as empathy, and recent research has revealed a strong connection between empathy and the concept of mindfulness (Gillard, Roark, Nyaga, & Bialeschki, 2011).

Group Development

Outdoor leadership experiences most often take place with groups of people. It is important for outdoor leaders to understand the way in which groups change over time so that they can adjust to the appropriate leadership style at any given moment. Sibthorp et al. (2007) investigated the development of participants in a National Outdoor Leadership School (NOLS) program. The researchers created an instrument, the NOLS Outcome Instrument, to measure participant development in the areas of communication, leadership, small group behavior, judgment in the outdoors, outdoor skills, and environmental awareness. All questions used a 10-point scale that rated each response from *Not like me* to *Like me*. Participants of NOLS

programs received this instrument from July 2004 to October 2004, and 663 participants responded. In addition to collecting quantitative data, the researchers interviewed 29 participants about their experiences in order to judge their feelings and understandings about the survey questions and enhance the findings through qualitative support. The study demographics were 63% male, with ages ranging from 14 to 62 and course experiences ranging from 14 to 94 days in length. Participants reported significant improvement in all of the leadership areas, including small group behavior. In addition, the eta-squared results ranged from .497 to .714, indicating that nearly 50% to 70% of the leadership areas were directly attributed to the participants' program experiences. Based on the results, Sibthorp et al. suggested that as groups continue to evolve and develop through the experience, the goals of leaders must change to keep groups in positive development tracks. If leaders fail to recognize the group development process, the participants may not gain the full developmental experiences they are capable of creating. Tuckman (1965) originally proposed this group development process in 1965; he also identified four distinct stages in the process.

Tuckman (1965) established a framework to examine the developmental process of groups of people as they spend significant amounts of time together. Tuckman also created a common language for the discussion of the group development process. Due to the nature of the research, he found it difficult to create a longitudinal research study of volunteers, so he investigated established groups of individuals. His research participants included those in group therapy sessions. Each group comprised five to 15 members and a therapist who had been together for 3 months or more. In addition to the therapy groups, Tuckman examined training groups (i.e., groups of individuals brought together to interact and develop with one another) that were together from 3 weeks to 6 months before disbanding. Through his examinations of the

groups and their interactions with the members, he created a four-stage model describing the process of each group's development.

Tuckman's (1965) first stage, Testing and Dependence, is characterized by group members identifying what is acceptable to the group and which reactions other group members may see. Group members seek out boundaries not to test them, just to understand where everyone stands. During the second stage, Intragroup Conflict, participants become hostile toward one another in order to express their individuality. The group tends to lack unity while it attempts to navigate through the conflict. As the conflict begins to subside, the group enters into stage three, Development of Group Cohesion, in which the group accepts the differences of each of the members and begins to unite as a single unit. The goal is group cohesion, and individuals may avoid conflict in order to not upset the group's new balance. The final stage of development, Functional-Role Relatedness, is when group members are aware of their responsibilities to the group. As a whole, the group is able to problem solve using the newly established relationships and roles of each member of the group.

This four-stage model of group development is a significant part of the research on outdoor participant experiences (Sutherland & Stroot, 2010). Although the model has remained the same, the names of the stages (i.e., Testing and Dependence, Intragroup Conflict, Development of Group Cohesion, and Functional-Role Relatedness) have changed to Forming, Storming, Norming, and Performing (Sutherland & Stroot, 2010). Because Tuckman's (1965) model forms the foundation for the understanding of good outdoor leaders and their groups, it is important to fully comprehend the four stages in this model.

Forming

Tuckman (1965) characterized the first stage as "the strong expression of dependency need by the members toward the trainer [or leader]" (p. 391). He described group members in

this stage as heavily relying on the structure provided by the leader and the arbitrary norms of the group that tend to instantly develop. The group almost entirely focuses on orientation and accepts most group goals that are presented to them. The group members are not free with discussion and try to reach consensus (Johnson, 2010). This stage is reflective of relationship development among the group members and leaders, which leads to the movement from the Forming to the Storming stage (Bonebright, 2010).

Storming

The second stage represents a period of interpersonal conflict (Bonebright, 2010). Tuckman (1965) described this stage as an interesting combination of dependence and hostility among group members. During this stage, rivalries occur as members position themselves within the hierarchy of the group. Tuckman described the group members during this stage as moving from a general dependence on structure for comfort to an overwhelming emotional response to task demands. The emotional response can lead individuals into unknown areas of interpersonal relationships and leave them lacking the security they may have felt during the previous stage (Bonebright, 2010). Although it may seem counterintuitive to group development, Storming is a necessary struggle for personal influence within the group (Johnson, 2010). The group structure and leadership that provided initial support is seen as a barrier to individuality and is resisted during the second stage (Bonebright, 2010). As groups move through this stage, group hierarchy is determined, and the group begins to come together again under the new hierarchy. In the outdoor recreation field, research has shown that during this stressful time, group members consistently look to find their places among the group (Sutherland & Stroot, 2010).

Norming

The third stage is characterized by a return to group cohesion as a priority (Tuckman, 1965). In this phase, group norms and values that have buy-in from group members emerge. Tuckman (1965) described group members as showing “affection bonds” (p. 392) and a general “we-feeling” (p. 392) while having a greater sense of identity within the group. The increased sense of identity and acceptance leads individuals to find the most effective ways of working with each other, which provides the opportunity to move into the fourth stage (Bonebright, 2010).

Performing

In the fourth and final stage, the group becomes task oriented in the manner in which it seeks discovery and opportunities to experiment in new ways on its own (Tuckman, 1965). The group provides mutual support to its members, accepts all group members, and develops norms that reflect the nature of the groups. This group can solve problems without significant input from a leader (Bonebright, 2010).

Tuckman and Jensen (1977) introduced a fifth stage, Adjourning, in 1977. In this stage, the group moves through a separation phase as the activity ends (Bonebright, 2010). In the re-examination of Tuckman's earlier work, it was determined that there was a distinct ending phase in which activity came to a conclusion and the group disbanded. Although this fifth stage is of great importance in the group formation process, the researcher of this study examined only the course of leadership through the activity. Because of the continued nature of the group's development after the leadership ends, this paper's review ends at the Performing stage.

Research on Tuckman's Group Development Theory

Tuckman's (1965) group development theory is often used to describe the experiences of groups as they participate in outdoor recreation activities. Dexel et al. (2010) used a week-long

kayaking expedition as a basis for testing the effectiveness of the group development model on outdoor recreation. They found that the model served as an accurate indication of the development of the group through the outdoor experience. Their research also indicated the importance of the leader's actions during the various stages of the group's development. Results showed that when leadership styles changed daily, and a routine was never established, the forward progression of group development was negatively impacted. The researchers also found that a lack of leadership communication negatively affected the group. Finally, the research revealed a strong correlation between the leader's decision making while focusing on the tasks assigned to the group and the group's positive development.

In each of the group development stages, several concerns arise that leaders must be able to address. Cassidy (2007) identified a concern that is evident in each of the four stages. Cassidy found group concerns in the Forming stage, purpose concerns in the Storming and Norming stages, and work concerns in the Performing stage. Group concerns dictate the need for group direction and purpose. Individual concerns reflect the need for leaders to understand their places within the group and gain acceptance from others. Purpose concerns include the need for understanding, and work concerns reflect the need for task completion (Cassidy, 2007). It is important for leaders to identify these concerns with the groups at each stage because leaders must effectively provide the leadership that addresses the concerns of a group wherever they may be along the development scale. Understanding how these stages relate to an outdoor experience is essential for understanding how leaders must adapt to the ever-changing situations presented in an outdoor context.

In the context of this study, the researcher sought to test the participants' awareness of these changes in the social structure of the group. Cassidy (2007) determined that different

stages relate to different concerns of the group, and Drexel et al. (2010) determined that the leadership of the group is essential in assisting with the proper development of that group; therefore, it can be seen that an awareness of these group changes is paramount. This study examined what can assist leaders in becoming more aware of these group developmental changes as research has already determined their importance. Tuckman's (1965) theory, with its established, definitive, sequential, and recognizable stages, provides an excellent framework from which to measure the awareness and development of the student leader. Tuckman's theory gives this study a specific observable outcome to examine to determine training and experiential effectiveness in leader development.

Situational Leadership

As the group continues to change throughout the outdoor experience, unexpected situations also emerge, and leaders must react to them. To be successful, leaders must recognize situational changes and must adjust their leadership styles accordingly. In order to better understand the group development process in an outdoor experiential setting, Sutherland and Stroot (2010) conducted an ethnographic case study of a 3-day rock-climbing trip. The researchers sought to understand the impact of participation in an outdoor experience when an inclusive element was present, specifically high-functioning autism. In this study, the researchers examined a group of seven participants ages 10 to 14; one participant had high-functioning autism. The research included direct field observations (i.e., notes), qualitative interviews, and quantitative checklists in order to use triangulation for confirmation of results (Sutherland & Stroot, 2010). Checklists used a 5-point scale, and each child rated the other children according to their desire to play with the children and how much they trusted them. The researchers compared results to the observational notes and interviews conducted throughout the experience and found an observational difference in group dynamics over the course of the

program, a finding that was consistent with Tuckman's (1965) developmental stages. However, Sutherland and Stroot (2010) also concluded that leaders could interrupt the developmental stages if they did not recognize the changes and did not adjust their leadership styles accordingly. By not recognizing where a group was along the developmental continuum and adapting their leadership style in order to address new situations, leaders can leave participants out of the process of moving the group forward developmentally. This led the researchers to conclude that not only is an understanding of the group development process necessary, but outdoor leaders must also be able to adjust their leadership styles to address the situations that arise with the changing group dynamics. In order to understand the importance of situational leadership awareness as a skill for outdoor leaders, it is appropriate to first examine the history of the model.

In 1970, Blanchard and Hersey (1970) re-examined the historical research on leadership theory to develop a more comprehensive model that clarified the leadership presented to a group and the group's readiness for the leader. Instead of conducting their own study, the researchers used existing data from a 1945 Ohio State University research study, which concluded that individual leadership styles varied greatly from the previously assumed democratic or authoritative styles of leadership. Two distinct leadership dimensions emerged from the existing data. Blanchard and Hersey found that leaders employ dimensions of initiating structure behavior (i.e., task oriented) and consideration behavior (i.e., relationship oriented). By plotting these two dimensions on a grid, the researchers developed four quadrants in which leaders may reside: high structure, low consideration; high structure, high consideration; low structure, high consideration; and low structure, low consideration. The four quadrants formed four distinct leadership styles, but the second half of the research on the topic of the followers' readiness level

or maturity was also necessary to fully understand these styles. Blanchard and Hersey examined the elements of the group for which these four situational leadership styles would be appropriate, and they based their examination on the concept of group maturity, defined as “achievement-motivation relative independent, and ability to take responsibility of an individual or group” (p. 305). Therefore, as a group develops in maturity, the individuals recognize a greater sense of internal motivation to achieve instead of needing the external motivation of a leader. In addition, group individuals are better able to take responsibility for their actions instead of needing a leader's direction. As the group grows in maturity, the leadership begins at high task and low behavior, moves to high task and high behavior, continues to low task and high behavior, and ends with low task and low behavior (Blanchard & Hersey, 1970). These levels are also referred to as Telling, Selling, Participating, and Delegating (Weber & Karman, 1991).

Recent research has supported that the maturity level of a group of participants in an outdoor recreational experience increases throughout the duration of the experience (Breunig, O'Connell, Todd, Anderson, & Young, 2010). During a 2-week outdoor recreational experience, participants were found to have increased skills in observational learning and developed mutual collaboration behaviors to achieve task-oriented goals (Breunig et al., 2010). The study also found the inverse of this phenomenon to be true—when participants focused on themselves and not on being part of the group, their sense of community and group togetherness suffered. Groups that suffered this loss of community were unable to reach a high level of leadership maturity and could not move into a new situation and, therefore, a differing leadership style. The level of maturity and development that the group had achieved can also be directly related to the change cycle through which the group was moving.

Blanchard and Hersey (1970) described two different change cycles that occur in a group as maturity develops: the participative change cycle and the coerced change cycle. According to Hersey and Blanchard (1980), these cycles differ based on whether a leader's authority comes from personal or position power. The researchers stated that personal power derives from the group giving authority to a leader while position power is the authority of a leader based on a role in which he or she assumes that gives the authority. The participative change cycle begins when a leader with position power gives knowledge to the group, which, in turn, helps to develop new attitudes. New attitudes change individual behaviors that lead to an overall group behavior change. This process works well for groups that have already developed a greater sense of maturity and can be implemented well by a leader who is using a high relational, low task or low relational, low task situational leadership style.

The coerced change cycle begins when a leader with positional power implements a direct change to the group's behavior. This group behavior change eventually leads to individual behavior changes—first attitude change (not necessarily positive) and then knowledge. At this point, with the new knowledge, the attitudes may adjust with a new understanding (Hersey & Blanchard, 1980). This change model works well for groups that have not reached a higher level of maturity and are not able to motivate themselves to change. A leader in a low relational, high task or high relational, high task situation would likely see this type of change process occur (Hersey & Blanchard, 1980).

Shooter, Paisley, and Sibthorp (2009) examined the relationships between the followers and the leader in an outdoor experience context. Specifically, they researched the outcomes associated with the correct relationship between a leader and the followers in a situational context. In order to conduct this research, they surveyed college students enrolled in outdoor

education skills courses with the Revised Life Orientation Test and a leadership style survey to utilize a factorial survey design. The survey featured six vignettes that described leader attributes in a situational context in which the students were to indicate the level to which they would trust the leader based on his or her actions. The researchers concluded that leaders could influence a participant's level of trust in them through the conscious display of appropriate attributes. This research supports the original observations of Blanchard and Hersey (1970), who stated that a leader must take into account the maturity and readiness level of the group in order to apply the appropriate type of leadership to the group. Although research confirms the need for leaders to adapt to the dynamic and ever-emerging situations that occur in an outdoor leadership context, the research on the desire for these attributes in the workforce is limited. To this author's knowledge only one study has examined the attributes and training backgrounds of outdoor leaders has been conducted.

In 2001, at the Association of Experiential Education National Conference, Medina (2001) conducted a research study to develop an identity model of an outdoor leader to include academic background, experiences, and leadership practices. Medina's sample was from 1,027 attendees of the 2000 Association of Experiential Education National Conference. The 203 respondents were directors (26.1%), coordinators (14.8%), and instructors (13.8%) with ages ranging from 24 to 45. In addition, the respondents were 56% female and 44% male. While examining the training background of the individuals, Medina found that nearly all participants (93%) believed that personal outdoor experiences were necessary for developing their outdoor leadership skills. Experiences included formalized training in developing situational leadership awareness through the use of outdoor situational context. Not only is it important to understand the leader's view of the situational context in the outdoors, but also how the differing situations

affect the participants (Medina, 2001). Leaders who understand the group's reactions and development are better able to understand the need for their appropriate responses to changing situations.

Integrating the Models for Leadership Effectiveness

Both the situational leadership model created by Blanchard and Hersey (1970) and the group development model created by Tuckman (1965) can be accurately used to describe the fundamental experiences of a group participating in an outdoor recreational activity and the leadership style involved in the activities, separately. Research into the integration of these two models has yielded definitive results for outdoor leaders. Weber and Karman (1991) noted that a group's perceived task, maturity level, and the necessary relationship assistance could suggest the appropriate leadership style. Selecting the appropriate leadership style requires the recognition of the development level at which the group resides in order to properly match the two. What follows is a discussion of the appropriate combinations between group development stage and leadership styles of outdoor leaders based on Weber and Karman's (1991) findings.

Forming-Telling

According to Weber and Karman (1991), a group beginning at the forming stage typically shows a low degree of task maturity while seeking boundaries of established structure from the leader. The motivation of individuals in the group may arise from the desire to develop a positive individual relationship with the leader and leader's favorable opinions of members of the group. The lack of confidence in the group and the focus of the members on the leader for support correspond to the Telling style of situational leadership (see Figure 1). The Telling style, with its high focus on task-oriented behavior and lower relational focus, is ideal for providing the direction that a group at this stage in development needs and focusing on the group concern (Weber & Karman, 1991). Most likely, a leader in this stage is working through a coerced

change cycle with the group due to the authority given to the leader from a position of power. The group begins to change focus from the whole to the individual while still relying on the leader to initiate the change (Hersey & Blanchard, 1980). In this stage, outdoor leaders must create opportunities for relationships to develop among the members of the group through active teambuilding or simply scheduling meal times so that everyone eats together (Breunig et al., 2010).

Storming-Selling

Tuckman (1970) found that as the group continues to work together, the interpersonal dynamics begin to change, and a new stage of development evolves. The changes in the group that marked the entry into the Storming phase (see Figure 1)—increased conflicts, withdrawal, and related behaviors—indicated the need for a shift in leadership style. As the group no longer felt a need to depend on the leader they may, in fact, openly confront the leadership. At this point, members of the group have moved beyond needing only superficial social interactions and strive to identify the hierarchy within themselves. The individual concern of this stage requires a greater relational interaction of the leader. The group has also gained maturity and may be ready for additional tasks (Weber & Karman, 1991). The high-relational and high-task behaviors that the leaders must exhibit fall into the Selling leadership style. A coerced change cycle similar to the previous period is most likely present in this stage, and the group conforms to a hierarchy. The positional power of the leader is still important, but the group may subtly challenge or overtly confront it (Hersey & Blanchard, 1980). In this stage, leaders must ensure that the challenge level is appropriate for the group. Simple tasks may not allow for the development of maturity, and difficult tasks may evoke increased frustration and conflict (Breunig et al., 2010). Leaders should empower members to take responsibility and to work to establish personal relationships with the group members and with the leader (Sibthorp et al., 2007).

Norming-Participating

Weber and Karman (1991) discussed that as the hierarchy of the group formed and the level of conflict began to subside, the group bonds began to strengthen. During the Norming stage (Tuckman, 1970), the group may be unwilling to accept total responsibility due to lower degrees of self-confidence. In order for the leader to assist the group in moving forward in development, he or she must reduce the reliance on task behavior and allow the members of the group to begin to function more on their own while the leader still maintains a high level of relational support (Weber & Karman, 1991). These actions move the leader into the Participating leadership style (see Figure 1). During this stage, the leader addresses the group's purpose concern by demonstrating how the group is now able to accomplish much more due to the reduction in task direction by the leader. The leader can see the change in the group as a movement into a fully functional unit able to take individual and group responsibility and make autonomous decisions (Weber & Karman, 1991). The change cycle during this stage moves from coerced to participative as the leader is able to rely on personal, not positional, power. This change allows individual conversations with group members to develop into greater group change (Hersey & Blanchard, 1980). The outdoor leader should begin to increase multiway communication within the group and encourage shared decision making (Weber & Karman, 1991), which can be something as simple as choosing the break points or the next campsite or allowing discussion about the following day's itinerary are examples. Allowing the group to make choices increases the group's sense of community and self-confidence (Breunig et al., 2010).

Performing-Delegating

Weber and Karman (1991) determined that as the group becomes more self-sustaining, the leader can continue to reduce the degree of relational behavior he or she gives to the group.

The Delegating style (see Figure 1) with its low relational and low task-based leadership, allows the group to successfully function independently while the leader provides minimal support. The concern for the group now moves to the task, and with the autonomy that the Delegating style provides, the members of the group experience intrinsic motivation through pride in a job well done and the creation and completion of appropriately challenging goals (Weber & Karman, 1991). The final change cycle in the group is consistent with the participative cycle. The leader power comes from an established personal relationship with the group. Knowledge directly passed on to the individuals is immediately incorporated into group behavior changes without extensive involvement or direction from the leader (Hersey & Blanchard, 1980). An outdoor leader functioning in the Delegating style acts in a maintenance capacity, ensuring that the group is setting reasonable goals, demonstrating safe behaviors, and offering assistance when asked. Risk management is still a top priority and must be examined to make sure that the group is adding the right amount of challenge based on their abilities (Breunig et al., 2010). Although the research up to this point has focused on the experience of the leader, the leader must also understand how the situation can affect a participant on an individual level.

Integrated Leadership Model

In order to better illustrate the research of Weber and Karman (1991) and provide a visual context for further discussion, the researcher created a representative dynamic model (see Figure 1). This model provides an adaptation of Weber and Karman's research by applying it to the outdoor-leader context researched by Priest and Gass (1987), Sutherland and Stroot (2010), and Shooter et al. (2009). By adapting the research and creating this dynamic model, a visual framework for approaching situational leadership and group development theory in an outdoor recreation setting was created. This adaptation helps to define the changes in leadership characteristics that should be seen as a group develops over time, specifically in the outdoor

recreation setting. This model provides the context by which the leadership of the student leader can be examined.

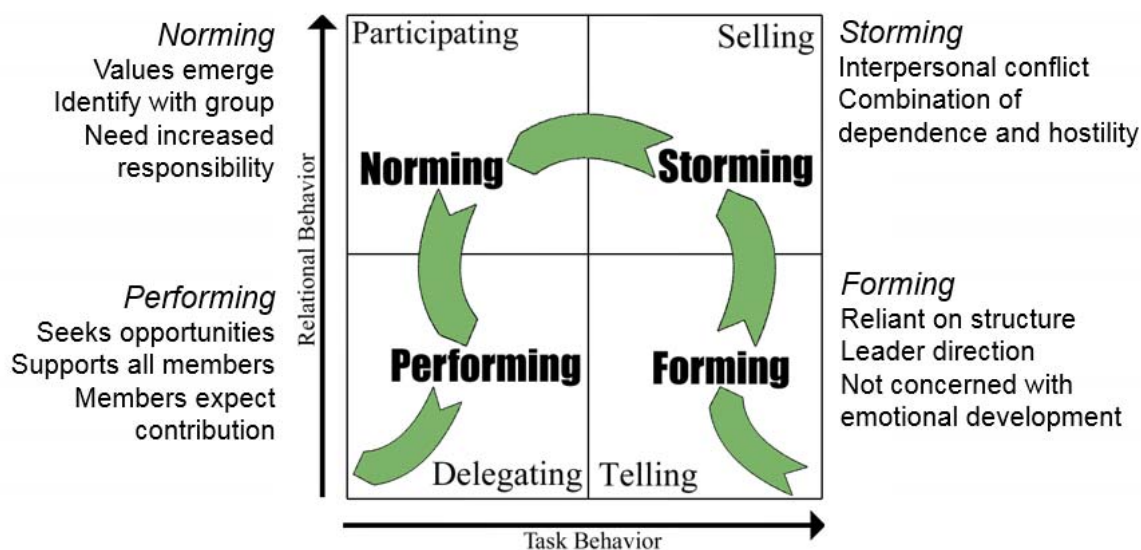


Figure 1. Integrated leadership model by Jerome Gabriel. This figure illustrates the integration of the situational leadership model with group development model. © Jerome Gabriel 2015

Situational Context of the Participant

Researchers Stewart and Cole (1999) examined the effects of the situational context on a participant's experience in an outdoor recreational activity. Their research question expanded the body of literature by examining the group experience related to overcrowding or the carrying capacity of a given outdoor recreational area. The researchers explored the relationship between participants and the environment in which they participated, such as a remote backpacking area or a front country campground, and the individual response to the capacity of the area. The sample group for this survey research included those who had advanced registration for a backcountry permit in the Grand Canyon National Park. Of the 452 participants invited into the study, 193 fully participated. Of the participants, 23% were female, 75% had completed a 4-year degree, and nearly half of those surveyed hiked with only two people in their groups. The survey asked the participants to respond to questions about their camping experience, including

crowding issues, interactions with other visitors, personal reflection, personal experiences, and meaningful improvement. Surveys were administered through a packet given to the participants as they headed into the backcountry for their trip and a follow-up mailed survey after receiving time to reflect. A regression model was created to determine the impact of a given situation and the stress level created on the attitude of the participant. The results indicated that an increase in length of time with other participants was positively correlated with a perceived indication of overcrowding and detrimental experience; this showed that as the situation changed (in this case, time spent with other individuals), the view of the experience changed. It is, therefore, not only the leader's responsibility to recognize the situational changes in himself or herself, but also how the change in a situation affects the view of the participant. This research demonstrates that the situational context has a direct effect on the attitude of the participant. In this case, it was a situation that included overcrowding as a focus, but other situational contexts can have a similar impact on the way in which a participant perceives the experience.

A sense of community is developed through the positive relationships between individuals through shared experiences (Breunig et al., 2010). In outdoor recreation, a major goal of leaders is to develop this sense of community through the fostering of positive relationships among the participants. The research of Breunig et al. (2010) focused on understanding the relationship between the participation in the outdoor experience and the participants' perceived sense of community. Those who participated in this research study were sophomore and junior recreation majors from a 4-year college in that State of New York. The students participated in a 13-day outdoor education course that emphasized outdoor living skills both in large- and small-group contexts. The senior staff members in charge of the program had from 10 to 30 years of experience and were familiar with the process associated with this

program. A total of 101 students participated in the study by completing the Perceived Sense of Community Scale at three separate times during the experience. This scale measures the mission, responsibility, and harmony of the group through 12-item Likert-scale questions. Twenty-three students then participated in a follow-up focus group to share qualitative data about their experiences. Results from the study indicated that the students' perceived sense of community significantly increased by the end of the course, which was supported through qualitative follow-up data, including responses about eating meals together, trip challenges, and daily debriefing sessions. In addition, students indicated that detractors from the sense of community included unequal contribution from group members and too great of a challenge during the trip. Clearly, the leader has a significant role in the development of this sense of community through the recognition of situational contexts. Blanchard and Hersey (1970) described the need for a leader to understand the readiness level of a group as one that includes its members' abilities to be self-motivated and skilled enough to complete a task. If the readiness or maturity of the group is not present, leaders must adjust their styles. Breunig et al. (2010) found a direct relationship between events that detract from the perceived sense of community of the group and a leader not correctly interpreting the readiness level of a group. Group members who do not believe they possess the skills or motivation to complete a task may see something as too challenging or may not be willing to equally participate. Understanding the situational context of the participant is essential to knowing how to balance the task and relational-oriented leadership necessary for that person. Although experienced leaders may have the opportunity to draw on years of experience to make decisions, college student leaders must utilize their limited experiences while drawing on the natural leadership characteristics they possess.

Leadership and the College Student

In the university setting, students receive opportunities to assume leadership roles in student organizations, clubs, teams, and even within social environments among peers (Arnall et al., 2014). Research has supported the concept that as students spend more time participating in leadership opportunities, they not only expose themselves to new leaderships skills, styles, and practices, but they also prepare themselves to apply these abilities in their future vocations (Arnall et al., 2014). Although the opportunities students receive may vary widely from campus to campus, the perception of leadership by the general college student remains surprisingly similar (Haber, 2012). Research conducted on college students' perceptions of leadership has concluded that as students continue to mature, their understanding of leadership changes from a leader-centered system to a more group-centered system (Komives, Owen, Longerbeam, Mainella, & Osteen, 2005). Regarding the focus of students who hold formal leadership positions, such as student outdoor leaders, researchers have found that these students hold a traditional view of leadership and leadership roles (e.g., a leader-centered and authoritative model; Komives et al., 2005).

In order to expand on this literature about the leadership perceptions of college students, Haber (2012) conducted a mixed-methods study to examine defined themes that college students used to describe leadership. Haber identified 10 themes with which college students align: collaborate, inspire, influence, direct, support, modeling, personal qualities, positive difference, shared goal, and task. Although all 10 themes emerged from the study, they were not equally seen throughout the responses. Influence, task, and direct were three of the five most common themes, and inspire, support, and collaborate were the least common themes. Haber's research supports the previous findings that college students' perceptions of leadership tend to focus toward an authoritative (i.e., directive) and leader-centered model with some focus on

group-centered benefits. Haber also found small differences in the perspectives while taking into account gender categories. For instance, women were 1.53 times more likely than men to indicate the importance of the collaborative theme ($\chi^2 = 7.38, p < .01$) and 1.50 times more likely than men to seek a focus on personal qualities while describing acceptable leadership ($\chi^2 = 7.90, p < .01$). Certain social and cultural expectations have been assigned to these leadership perspectives, specifically while examining gender. These expectations can lead to a challenge for leaders when the appropriate leadership style is not reflected in what society defines as a gender role.

Gender and Outdoor Leadership

According to Wittmer (2001), in outdoor leadership, gender can cause leaders to have pre-assigned roles that they are expected to show in their leadership styles. Followers expect a male leader to be “autonomous, task-oriented, organized, controlling, unemotional, directive, assertive, autocratic, dominating, or independent” (p. 173). In contrast, female leaders are expected to be “mediating, facilitating, less efficient, less action-oriented, understanding, helpful, warm, democratic, unselfish, collaborative, interpersonally oriented, concerned with others, or emotionally expressive” (p. 173). The situational leadership model created by Blanchard and Hersey (1970) stipulates that a balance of task and relational behavior is necessary in order to model the appropriate leadership style for a given situation. Wittmer (2001) found that although a balance of task and relational behavior is necessary, regardless of the situation, gender roles dictate significantly more task-based leadership from male leaders and more relational-based leadership from female leaders. A leader who can identify a given situation and then appropriately respond should be able to effectively utilize any of the leadership styles regardless of gender (Wittmer, 2001). It is possible that because of the strong social stigma associated with

male versus female leaders, some members of a gender may feel less comfortable expressing the leadership styles associated with an opposing gender. For instance, a male leader may feel uncomfortable with a situation that requires a high amount of interpersonal and emotional interaction (i.e., Participating) while a female leader may feel uncomfortable with a situation that requires a high amount of task-based leadership (i.e., Telling) due to the potential negative evaluation by the participants (Wittmer, 2001).

The researcher of this study sought to determine if a difference exists in the dominant styles of leaders based on gender differences. As gender, racial, and ethnic differences become more apparent in outdoor recreation, it is important to understand the underlying principles that both promote and hinder social justice within the field of outdoor recreation.

Social Justice in Outdoor Leadership

Although not specifically addressed in this study, it is important to note that social justice plays a large role in the development of a positive outdoor recreation experience for all participants. The positive experience begins and ends with the leader's ability to understand the role of social justice within the context of each participant. Social justice includes the understanding and actions necessary to address the issues faced by potentially marginalized members of the population regarding a segment of society—in this case, during outdoor recreation (Warren, 2002). Warren (2002) argued that it is essential for a well-developed outdoor leader to have an understanding of the race, gender, and class issues that may arise during an outdoor recreation experience and the ability to address the issues in a positive manner. Warren found that the most effective way to address social justice issues is to deliberately seek out those from diverse populations to serve in leadership roles in order to gain varying perspectives on the social justice issues in outdoor recreation. Unfortunately, in many situations, there is a lack of diversity in the leadership of outdoor recreation programs, especially at the

college level (Warren, 2002). When diversity cannot be achieved through the recruitment of leaders, it is essential for the training of the leaders who are present to include social justice training that includes topics such as social justice conflicts, definition of terms, cross-cultural teambuilding, and values clarification (Warren, 2002). Beyond an understanding of the importance of leadership development in social justice issues, it is also important to note that a number of social justice issues in outdoor recreation directly pertain to those involved in the experience.

In 2002, Cordell, Betz, and Green (2002) conducted a study on the involvement of various racial groups in outdoor recreation activities such as hiking, outdoor swimming, canoeing, skiing, and hunting. The results indicated that a significantly higher proportion of White and American Indian respondents would participate in hiking, outdoor swimming, canoeing, and skiing compared to other racial groups. In comparison, Hispanic respondents indicated a higher participation than other groups in hiking while Black respondents did not report participation in any of the indicated outdoor activities. The researchers argued that the main explanation for the decline in participation by non-White groups is the increasing cost to participate in each of the activities (e.g., rental of canoes, ski equipment and lift ticket, hunting equipment). Geography may be another reason for the decrease in involvement in outdoor recreation activities by non-White participants (Shinew et al., 2002). Research shows that a disproportionate number of Black and Hispanic families do not live in close proximity to natural resource areas that would give them the opportunity to grow up experiencing outdoor recreation in the natural environment (Shinew et al., 2002). These differences can lead to a larger variation on how an individual may view outdoor recreation and, in turn, how an outdoor leader must respond to varying viewpoints. For instance, a middle-income White student in a leadership

position may have difficulty understanding and relating to a lower-income Black student who is not interested in participating in an outdoor recreation activity due to a lack of exposure to the activity. According to research, in order to respond to these differences, active recruitment of diverse leaders or a systematic inclusion of training modules that address social justice issues in order to bring awareness is necessary (Warren, 2002).

Summary

The background of theory in outdoor leadership began in 1965 when Tuckman developed the four-stage model of group development. Sibthorp et al. (2007) used this model and its four stages—Forming, Storming, Norming, and Performing—as a framework for their research on outdoor participant development. They found that it is essential for leaders to understand the group development process in order to help participants to effectively develop in the various stages and use empathy to develop relationships (Gillard et al., 2011; Sibthorp et al., 2007). This understanding supported Priest's (1987) earlier research and identification of 12 outdoor leadership elements. An understanding of situational leadership theory, first developed through the research of Blanchard and Hersey (1970), is also essential for an outdoor leader to understand. Blanchard and Hersey created a leadership style that balances the dimensions of structure (i.e., task based) and compassion (i.e., relationship based) leadership traits. In addition to understanding leadership traits, a leader must also be able to recognize the maturity of the group based on skill level to choose the correct leadership style (Blanchard & Hersey, 1970). This leadership model has been deemed essential by outdoor leaders for recognizing the need for changing leadership styles as groups move through the developmental process (Sutherland & Stroot, 2010).

Finally, research has demonstrated a need for an understanding of the situational context not just from leaders' perspectives, but also the participants' perspectives. Situational context on

participants' views of the experience (Stewart & Cole, 1999) and the perceived sense of community created through these outdoor experiences (Breunig et al., 2010) have both shown that the situational context of the experience is an important factor in the development of a positive experience for outdoor participants. The ability leaders to utilize all of the leadership styles appropriate to the situation may also affect experience. Gender differences may cause leaders to be uncomfortable utilizing appropriate leadership styles if the styles fall outside of pre-defined gender norms (Wittmer, 2001). It is imperative for leaders to understand this research and theory in order to play positive roles in the development and formation of the positive outdoor experience.

Research has demonstrated the importance of understanding situational leadership theory. However, the research currently lacks in how this understanding is developed and in the examination of the situational leadership theory from a quantitative perspective. This study fills these gaps in research by providing a systematic quantitative examination of the process of developing an awareness of situational leadership through formal staff training and field leadership through the use of ELSA.

CHAPTER III. METHODOLOGY

This study was designed to identify the effectiveness of formal staff training versus field leadership in determining the development of outdoor situational leadership awareness. The researcher explored whether formal staff training or field leadership affected differences in dominant leader style and aimed to determine if gender played a role in the dominant leadership styles of college-aged outdoor leaders. This chapter describes the research design, participants, instrumentation, data collection procedures, research questions, variables, and data analysis methods used in the study.

Research Design

Research design frameworks are chosen based on the type of data being collected, desired statistical outcome, and desired procedure. This study utilized quasi-experimental time series research to examine whether one treatment (i.e., formal staff training or field leadership) developed a greater awareness of situational leadership among college student outdoor leaders. Quasi-experimental research examines the effect of a treatment on an existing group of participants and differs from true experimental research because the treatment group is an already existing group; therefore, random assignment cannot be used in its creation (Fraenkel & Wallen, 2006).

A time series design measures a variable at multiple points in time (Imdadullah, 2013). In this case, the multiple points of data were taken prior to training, after training, and after field leadership. Essentially, one treatment was applied between the first and second data points, and different treatments were applied between the second and third data points. The time series design is similar to a simple pre-test/post-test design, but in a time series design, there are several pre-tests and post-tests (Imdadullah, 2013). The advantage of a time series design is that the

changes in data points can be compared across time prior to both treatments or after both treatments instead of across a single data set (Imdadullah, 2013).

The time series design was appropriate because two treatments were implemented with three data collections points. The OLS was administered prior to formal staff training as a Pre-Test, after staff training as Post-Test 1, and following 7 days of practical outdoor leadership as Post-Test 2. The staff training included a period of 1 or more days of dedicated training led by a professional staff member to develop skills and abilities that allowed students to lead trips. The style of this training varied significantly from university to university; therefore, a section of the instrument was used to assess these differences. The field leadership was completed after 7 days (not necessarily consecutive) of leadership.

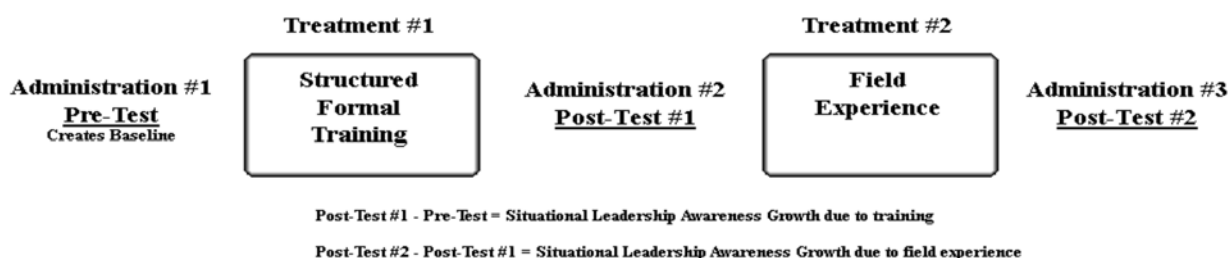


Figure 2. Time series design used in this study.

Participants

The participants in this study comprised students from a number of self-selecting outdoor programs across the country who were members of AORE. The entire AORE college membership of nearly 500 college and university programs was invited to participate in the study. The researcher's targeted response was 10 to 15 schools representing 100 to 150 students. Students were between the ages of 18 and 22, were enrolled as full-time students, and were leaders in collegiate outdoor recreation programs at a variety of universities across the country. The final result yielded four participating schools and 120 student participants. Because of the

self-selection process of an already established group, it was difficult to guarantee a culturally diverse population; however, gender, academics, and prior leadership experience represented significant diversity. Students completed the surveys during Spring 2014, Summer 2014, and early Fall 2014. The survey data were added to a significant amount of data that AORE had already collected during Spring 2013 and Summer 2013. In AORE's first data collection, the participants were from Bowling Green State University (BGSU) in Ohio, Ohio State University, and Moorehead State in Kentucky while the second data gathering added participants from Kalamazoo College in Michigan. Institutionally, the highest concentration of participants came from Kalamazoo College, which may be attributed to the fact that this was the only program that requested a paper version of the survey for the students to complete and return. Kalamazoo also had the most condensed schedule with the pre-training, post-training, and post-experience surveys being completed within 4 weeks. The student leaders in these outdoor programs completed the online surveys prior to and after their trainings while only a few completed the third data collection at the conclusion of the field leadership. These students had the same demographic make-up that was proposed for the data collection in this study.

Instrumentation

The study participants completed the online OLS, which includes three sections. Section 1 contained ELSA, which was developed by Philips and Philips (2003) for the Wilderness Education Association. Section 2 elicited demographic information, and Section 3 gathered information regarding training experiences. Each OLS section is described below. In addition, the instrument obtained demographic data from study participants as well as information about their leadership trainings.

Section 1: ELSA

ELSA is based upon the situational leadership model created by Blanchard and Hersey (1970); it measures leadership style adaptability and effectiveness based on the situational leadership theory to determine the leader's awareness of various styles. The situational leadership model uses a balance of task-oriented and relationship-oriented leadership as a basis for the appropriate style dependent upon the maturity or readiness level of a group (Hersey & Blanchard, 1981). This balance creates four independent leader options—the Telling, Selling, Participating, and Delegating styles of leadership (Hersey & Blanchard, 1981). The instrument utilized situational-based questions to determine if an individual could determine the appropriate leadership style for a given situation and if that individual had a tendency toward one or more leadership style. Items presented 12 outdoor-based scenarios and four differing leadership options for each scenario. Students chose the leadership option they believed best fit each scenario, and they scored each option from 1 to 4 points based on the effectiveness of the style for the situation. For example, one question stated, “You have been initiating friendly conversation and showing concern for the group as individuals. Their performance is declining rapidly. You would . . .” (M. Phipps & C. Phipps, personal communication, March 25, 2013). Four answers followed the question: “Discuss the goals and importance of task completion,” “Talk over the problem with the group and set goals for them,” “Wait for the group to formulate a solution and be prepared to give them direction,” and “Allow the group to carry on without interference” (M. Phipps & C. Phipps, personal communication, March 25, 2013). In this case, the correct, or most appropriate, answer was the first response—“Discuss the goals and importance of task completion.” In order to correctly answer, the individual must have understood and recognized a low maturity or readiness level in a group due to the low relational level (i.e., friendly conversation and concern for the group's individuals, not the group as a

whole; M. Phipps & C. Phipps, personal communication, March 25, 2013). Because the group was not at a level at which it could assume responsibility due to a lack of understanding, discussion of the goals and task completion was the most valuable leadership step.

The other 11 questions followed this same pattern and thought process in order to accurately measure a participant's understanding of situational leadership and its application in an outdoor leadership setting.

The final analysis for the instrument focused on two main areas. The first area was the determination of the participant's understanding of situational leadership through the scores totaled from the analysis document on correct to incorrect answers. The second subset of data was the determination of a participant's dominant or alternate styles of leadership, which were also determined through the scoring analysis.

The scoring of the instrument worked by assigning a point total to the answer given based on the situation. Of the four possible answers, the most correct answer scored 4 points, the next most correct answer scored 3 points, the next answer scored 2 points, and the least correct answer scored 1 point. A perfect ELSA score, indicating great awareness of situational leadership by understanding the situations presented and appropriately responding, was 48 (i.e., 12 questions multiplied by 4 points for every perfect answer). The lowest score possible was 12 (i.e., 12 questions multiplied by 1 point for the least correct answer).

In addition to scoring the overall understanding of situational leadership awareness, the instrument generated a score for the dominant style chosen by the participant. For each question, the four possible answers reflected the four different styles of situational leadership (i.e., Directing, Selling, Telling, and Participating). Each question was also scored by giving the participant 1 point for each style of leadership chosen for a total of 12 points regardless of the

correctness of the answer (i.e., 1 point on each question). Each style was then totaled to determine which style was the most dominant one chosen. After all 12 questions had been analyzed, each of the four categories had a score of 0 through 12. The highest scored category determined the individual's most dominant leadership style. An individual evenly scoring across all four styles (e.g., a 3 in each category) was considered adaptable to a given situation and not always tending to lean toward a predominant leadership style.

Mann independently tested the instrument in 1992 to determine reliability (Phipps, Mann, & Ballard, 2002). Through chi-square and contingency coefficient testing, the dominant style and alternate style scores remained stable while the effectiveness scores did not prove to be as stable due to the low number of questions on the test (M. Phipps & C. Phipps, personal communication, March 25, 2013). In addition, Ballard calculated point biserial correlation coefficients in 1989 to determine that among the 12 situations, nine were significant at the .01 level, and three were significant at the .05 level (Phipps et al., 2002). This section was present in all three administrations of the instrument.

This instrument was previously used in research to measure the effective understanding of situational leadership and dominant leadership style for student outdoor leaders (Grube, Phipps, & Grube, 2002). It was also used as a tool to determine the effectiveness of the student outdoor leadership training in which these individuals were participants (Grube et al., 2002). The tool was used during student leader training for a group of 10 college-aged student outdoor leaders. The results accurately described the leadership styles of the students in relation to their abilities to understand their dominant styles, which was the purpose of the study. The instrument had already proved accurate for the measurement of leadership styles and as a tool for training. Its use in this research has used the same style of measurement for a different purpose.

Section 2: Demographics

The second section of the instrument included demographic questions that matched participants across all three administrations of the instrument. Questions were asked about age, gender, race, number of years as a college student, number of years with an outdoor program, enrollment in an outdoor-based academic degree, and First Aid certifications. Responses were used in the analysis to help control for experience, gender, and other demographic statistics in order to determine the results of the study. This section was present in all three administrations of the instrument.

Section 3: Training Information

The final section was only present in the second administration of the instrument in order to control for the experience of formal staff training. Because staff trainings can significantly vary in duration, activities, and leadership opportunities, an evaluation of the formal staff training was included in the post-training survey. This section measured the length of training, whether a situational leadership component was present, whether the training used field leadership, and whether the training used a leader-of-the-day experience. The leader-of-the-day experience features a staff member or a pair of staff members taking charge of the training group for the day to make leadership decisions, handle conflict or crises situations, and manage the overall experience of the group. It is used as a tool to reflect the experience of leading an actual group in a controlled setting for learning purposes.

With this information, the researcher controlled for variations in training, length of time, activities, and content to determine if a type or style of training was more effective while also examining the body of the training experience as a whole. In this research, all participating universities had trainings of similar length (i.e., 1 week), although the content varied.

Procedures

The original data set collected in Spring 2013 and Summer 2013 was conducted by AORE's national office through its contact with various outdoor program directors around the Midwestern United States. The directors received three separate links to online applications of the OLS. The first application used Sections 1 and 2; the second application utilized Sections 1, 2, and 3; and the third applications again utilized Sections 1 and 2. Each director was asked to provide the links to his or her students and remind the students again at the conclusion of their formal staff training and field leadership to complete the surveys. Data were then stored by AORE for further research on training by members of the association.

Before the process of data collection began, the researcher followed the appropriate guidelines for Human Studies Review Board (HSRB) approval and after receiving approval, began to work with the AORE research committee to contact all college and university outdoor programs. After identifying an acceptable number of college and university programs, the researcher communicated with the directors regarding the instrument administration process. An online version of the instrument was created along with a script that the individual directors read to their staff members prior to taking on online instrument.

The instrument was first administered prior to the outdoor leadership training at the individual institutions. The second administration was conducted at the conclusion of the staff training and included the third section in the instrument that collected data about the style of staff training participants experienced; the duration and location of training; and leadership requirements. The final administration of the instrument occurred after students had participated in at least 7 days of field leadership through their programs. Field leadership was defined as an experience in which the student, alone or with another student leader, was placed in charge of the

outdoor activities and well-being of a group of participants for the day without the guidance of another professional staff member.

In order to include participants' scores in analyses, all participants must have completed the survey instrument in its entirety. Incomplete surveys could not be effectively scored and, therefore, were not used in the research. The final scoring resulted in a score of 12 to 48 for the situational leadership awareness and a score of 0 to 12 in each leadership style to determine a dominant style.

Research Questions

1. Is field leadership more effective than formal staff training in creating situational leadership awareness?
2. Does formal staff training or field leadership create a change in the dominant situational leadership style of a student leader?
3. What are the major demographic influences on the dominant style of leadership for student outdoor leaders?

Data Analysis

The previous three research questions guided the data analysis for this study. All survey data were downloaded into Excel and then moved to the SPSS statistical software for analysis. Data from the three administrations were merged for the participants. The subscale of situational leadership awareness was calculated for each survey administrations (i.e., Pre-Test, Post-Test 1, and Post-Test 2) by calculating the sum of items 1 through 12. Situational leadership awareness growth scores were then calculated to reflect growth from training (i.e., Growth 1 = Post-Test 1 - Pre-Test) and growth from field leadership (i.e., Growth 2 = Post-Test 2 - Post-Test 1). The leadership style variable was also calculated for each administration point. Dichotomous change variables were created for leadership style change across the administration points, with 1

indicating change and 0 indicating no change. The Change 1 variable represented whether a change in leadership style had occurred from Pre-Test to Post-Test 1. The Change 2 variable represented whether a change in leadership style had occurred from Post-Test 1 to Post-Test 2.

Descriptive statistics were collected for all items and variables. A variety of inferential tests was calculated to examine the research questions. The first research question examined whether field leadership is more effective than structured training in creating situational leadership awareness. A *t* test for related (correlated) samples compared the difference in growth scores between the pre- and post-training difference (i.e., Growth 1) and the post-training/post-field leadership (i.e., Growth 2). Validity threats associated with the use of the time series design included the possibility of a practice effect due to participants taking the same instrument multiple times; instrumentation issues due to the instrument changing (although the survey was developed as a static online survey); and the uncontrolled history of the participants, meaning that there was a possibility for participants to gain additional knowledge outside of the aforementioned treatments that could have influenced the results (Fraenkel & Wallen, 2006).

The second research question examined whether either training method was effective in changing the dominant style of situational leadership in a student leader. McNemar's test was calculated to determine the treatment effects on leadership style change. This test compared the pre- and post-values given to the most dominant leadership style for an individual before and after both formal training and field leadership to determine if a significant change occurred from either treatment. As with the first research question, the same threats to validity for the data analysis of this question existed.

Finally, the third research question examined demographic differences in the dominant leadership style for a student leader. This research question was evaluated through the use of the

chi-square test of independent samples that compared demographic differences in the division of leadership styles between the four categories (i.e., Telling, Selling, Participating, and Delegating). The test compared the expected frequencies of an even distribution across all four categories with the actual distribution scores received from the test. The initial scores from pre-training were utilized to investigate this research question to ensure that the treatment was not affecting the demographic differences in the scoring. The relationship between varying demographics and dominant leadership styles were determined by the calculated contingency coefficient and the related table based on the degrees of freedom from the sample (see Table 1).

Table 1

Summary of Research Questions, Variables, and Data Analyses

Research Question	Independent Variables	Dependent Variables	Data Analysis
1. Is field leadership more effective than formal staff training in creating situational leadership awareness?	Training type (formal vs. field leadership) categorical	Situational leadership awareness growth (Q) Growth 1 Growth 2	<i>t</i> test of related samples
2. Does formal staff training or field leadership create a change in the dominant situational leadership style of a student leader?	Formal training (Pre-Test vs. Post-Test 1) categorical	Leadership style Change (categorical) Change 1 Change 2	McNemar's test
3. What are the major demographic influences on the dominant style of leadership for student outdoor leaders?	Gender (categorical)	Leadership style (categorical)	Chi-square test of independence

Assumptions

For the purpose of this study, the researcher made the following assumptions about the participants and the instrument:

- Participants will respond in good faith about their backgrounds and histories.
- Participants comprehend the situations and leadership style items provided.
- Participants will be representative of the target population.
- The survey instrument is reliable and valid and measures the awareness of situational leadership as described.

CHAPTER IV. FINDINGS

This chapter features both the demographic and inferential results of the study. The researcher has summarized the demographic results and has presented the inferential results by research question.

Demographic Summary

In order to understand the significance of the results of this study, it is important to first consider the demographic nature of the 119 student participants. The participant breakdown is as follows: first survey, $n = 106$; second survey, $n = 39$; and final survey, $n = 27$. The following data summarize the demographics of the survey participants. Although all participants were asked demographic questions about gender, race, and age, only initial survey participants were asked the final set of demographic information (i.e., First Aid certification, years in college, years in an outdoor program, and college degree sought).

Gender results revealed that the majority of participants were female ($n = 68$, 57.1%). Racial background (see Table 2) indicated that the majority of study participants were White ($n = 108$, 90.8%). Of the 11 minority participants, four identified themselves as Asian. There were no Black participants.

Table 2

Racial Summary of Outdoor Leadership Survey Participants

Race	<i>N</i>	% of Total
White	108	90.8
Black	0	0.0
Hispanic	3	2.5
Asian	4	3.4
Native Hawaiian	1	0.8
American Indian	2	1.7
Other	1	0.8
Total	119	100.0

The ages of the survey participants, ranging from 18 to 22 (see Table 3), represented the traditional undergraduate college student. The majority of participants (58.7%) were 18 and 19 years old. The average age of participants was 19.9 years.

Table 3

Age Summary of Outdoor Leadership Survey Participants

Age	<i>N</i>	% of Total
18	28	23.5
19	30	25.2
20	20	16.8
21	21	17.6
22	7	5.9
23	13	10.9
Total	119	100.0

In the first survey, participants ($n = 106$) also provided information about their previous academic and outdoor education experiences (see Table 4). The summary of First Aid training by participants showed that the Wilderness First Responder certification was the most common certification (34.9%), followed by Red Cross First Aid (32.1%). The researcher found the Wilderness First Aid certification and the Wilderness EMT certification to be rare among the participants of this survey.

Nearly half of the participants (49%) had completed only the first year of college, indicating sophomore status, and 40% of participants identified as juniors and seniors. A few participants shared that they had spent more than 4 or 5 years in college, suggesting that they were graduate students or had taken more than the typical 4 to 5 years to complete their degrees.

Nearly 84% of the participants indicated that the length of time they had spent in outdoor recreation programs was between 0 and 2 years. Only six participants shared that they had more than 4 years of participation in outdoor recreation programs at the collegiate level. In terms of

academic degrees sought by participants, only 11.3% were seeking a degree in the outdoor recreation field.

Table 4

Background Summary of Outdoor Leadership Survey Participants (First Survey Only)

Background	<i>n</i>	% of Total
First Aid Training		
None	27	25.4
Red Cross First Aid	34	32.1
Wilderness First Aid	6	5.7
Wilderness First Responder	37	34.9
Wilderness EMT	2	1.9
Years Completed College		
1	52	49.0
2	17	16.0
3	18	17.0
4	9	8.5
5	4	3.8
6	2	1.9
7+	4	3.8
Years in the Outdoor Recreation Program		
0	23	21.7
1	54	50.9
2	13	12.3
3	10	9.5
4	3	2.8
Attaining an Outdoor Recreation Degree		
Yes	12	11.3
No	94	88.7

Research Question 1

Is field leadership more effective than formal staff training in creating situational leadership awareness?

To examine the effectiveness of formal staff training and field leadership in improving the participants' situational leadership awareness, the researcher computed growth scores.

Growth 1 represented the pre-training and post-training awareness score difference, and Growth

2 represented the post-training and post-experience awareness score difference. Because this analysis required participant completion of all three surveys, only 17 individuals were studied.

The researcher used t tests of related samples to examine the difference between the two growth scores and found that participation in training or an extended leadership experience did not significantly change the SLAS, $t(16) = -1.532, p = .146$, two-tailed (see Table 5).

Table 5

Descriptive Statistics for Situational Leadership Awareness Scores (SLAS) and Growth Scores

Scores	M	SD
Pre-Training Score	29.47	3.30
Post-Training Score	28.94	3.81
Post-Experience Score	29.65	2.87
Growth 1	-.59	3.64
Growth 2	1.18	3.32

Research Question 2

Does formal staff training or field leadership create a change in the dominant situational leadership style of a student leader?

To examine the effect of formal staff training on the dominant leadership styles of the participants, a chi-square analysis was conducted utilizing McNemar's test to compare the dominant leadership styles of the participants prior to the training and the dominant leadership styles after the training had concluded. In order to determine the effect of the training, only the participants who recorded results prior to and after training ($n = 34$) were used. The dominant leadership styles were calculated using the ELSA rubric on the participants' pre-training and post-training survey responses. The results of this test indicated no significant relationship between the dominant leadership styles of the participants prior to and after completion of the formal staff training, McNemar $\chi^2 = 5.24, p = .263$, two-tailed (see Table 6).

Table 6

Dominant Leadership Styles Before and After Training

		Post-Training Dominant Leadership Style (DLS)				
		Telling	Selling	Participating	Delegating	Total
Pre- Training DLS	Telling	10	2	1	4	17
	Selling	7	1	0	1	9
	Participating	4	0	1	0	5
	Delegating	2	1	0	0	3
Total		23	4	2	5	34

For this research question, the researcher used chi-square analysis with McNemar's test to examine change in dominant leadership style as a result of formal leadership experience. The same process was used for determining the dominant leadership style of participants. In addition, only the participants who completed both a post-training and post-experience survey for this examination ($n = 17$) were used. Due to the small sample size, the analysis could not be conducted. Although there were no statistical outcomes to examine, leadership style frequencies showed minimal change due to training experience. Overall, the leadership style of Telling was dominant for the majority of participants after formal staff training and after field leadership experience (see Table 7).

Table 7

*Frequencies of Dominant Leadership Styles After Training and After Field Leadership**Experience*

		Post-Experience Dominant Leadership Style (DLS)				
		Telling	Selling	Participating	Delegating	Total
Post- Training DLS	Telling	9	1	0	2	12
	Selling	0	1	1	0	2
	Participating	0	0	0	0	0
	Delegating	3	0	0	0	3
Total		12	2	1	2	17

The researcher conducted the final chi-square analysis utilizing McNemar's test to determine if there was a significant change in the dominant leadership styles of participants prior to training compared with the dominant leadership styles of participants after the formal leadership experience, a measurement encompassing the entire participant experience. As with the previous two analyses, the dominant leadership styles of participants using the ELSA rubric for all participants who had completed both the pre-training and post-experience surveys ($n = 19$) were calculated. Results revealed no significant change in dominant leadership styles of the participants prior to training and after completion of the field leadership experience, McNemar $\chi^2 = 3.33, p = .649$, two-tailed (see Table 8).

Table 8

Chi-Square Test of Dominant Leadership Styles Before Training and After Field Leadership Experience Utilizing McNemar's Test

		Post-Experience Dominant Leadership Style (DLS)				Total
		Telling	Selling	Participating	Delegating	
Pre- Training DLS	Telling	7	1	0	2	10
	Selling	3	0	1	1	5
	Participating	1	1	0	0	2
	Delegating	1	0	0	1	2
	Total	12	2	1	4	19

Finally, the researcher conducted Analysis of Variance (ANOVA) to determine if there were differences between the means of the dominant leadership styles when examined through the changes in the situational leadership awareness scores (Δ SLAS) both before and after training and after training and after the field leadership experience. The purpose of this test was to determine whether any variance found in the resulting dominant leadership styles could be attributed to either the training or the field experience. The amount of change in the participants' scores showed no significant change in the SLAS due to training, $F(3, 30) = .127, p = .943$, or

the formal field leadership experience, $F(3, 12) = .832, p = .502$, when compared with the dominant leadership style of the individual before the study began (see Table 9).

Table 9

ANOVA Test to Compare Pre-Training Dominant Leadership Styles With Changes in Situational Leadership Awareness Scores (SLAS)

	Δ SLAS From Pre-Training to Post-Training			Δ SLAS From Post-Training to Post-Experience		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Telling	17	-0.71	4.13	8	1.13	3.56
Selling	9	-0.33	3.97	4	2.25	3.30
Participating	5	0.20	2.68	2	-2.00	1.41
Delegating	3	-1.33	1.15	2	0.0	1.41

Research Question 3

What are the major demographic influences on the dominant style of leadership for student outdoor leaders?

In order to examine the effects of the various demographic differences in the dominant leadership styles of the study participants, multiple independent *t*-test and chi-square analyses were utilized. Each independent *t*-test and chi-square analysis compared a demographic trait (i.e., gender, degree seeking, prior participation, and length of participation) in relation to dominant leadership style. By analyzing these demographic variables, the researcher sought to determine if any of the variables had a relationship with the participants' SLAS and, therefore, a changing dominant leadership style prior to formal staff training, after formal staff training, or after the field leadership experience.

Gender

The first area of examination was the role that gender played in the SLAS of participants. The total number of participants varied in each stage of the study depending on the number of

participants who completed the surveys in pre-training ($n = 106$), post-training ($n = 34$), and post-experience ($n = 19$). For each stage, a t test of independent samples was used to determine if a relationship had occurred between gender and SLAS at any stage of the experiment. SLAS at any point of measurement did not differ by gender (see Table 10).

The researcher also examined gender differences in change of SLAS using t tests of independent samples. Specifically, change from pre-training to post-training ($n = 34$) and post-training to post-experience ($n = 16$) were examined. As with the results of gender on SLAS, no statistically significant gender differences were revealed (see Table 10).

Table 10

Gender Differences in Situational Leadership Awareness Scores (SLAS)

	Male			Female			t	P
	n	M	SD	n	M	SD		
Pre-Training SLAS	47	29.19	3.29	58	29.35	3.33	-0.24	.814
Post-Training SLAS	7	29.29	4.92	27	28.85	3.57	0.27	.793
Post-Experience SLAS	3	28.00	3.00	16	29.63	2.96	-0.87	.396
Δ SLAS from Pre-Training to Post-Training	7	-0.57	3.99	27	-.51	3.62	-0.03	.973
Δ SLAS from Post-Training to Post-Experience	2	-2.00	2.82	14	1.29	3.10	-1.40	.180

In continuing to examine Research Question 3, the researcher compared the dominant leadership styles of male and female participants through a chi-square analysis of pre-training dominant leader styles ($n = 106$), post-training dominant leadership styles ($n = 34$), and post-experience dominant leadership styles ($n = 19$). Although gender differences were not apparent in SLAS or change in scores, a chi-square test of independence was used to determine if there was a statistically significant difference in dominant leadership styles at the measurement points of pre-training, post-training, and post-experience. Gender differences were not significant in dominant leadership style at pre-training, $\chi^2 = 3.53$, $p = .733$, two-tailed, or at post-experience,

$\chi^2 = .825, p = .844$, two-tailed. However, post-training gender differences were significant, $\chi^2 = 7.85, p = .049$, two-tailed (see Table 11).

Table 11

Dominant Leadership Style by Gender

		Male	Female
Pre-Training Dominant Leadership Style (DLS)	Telling	22	28
	Selling	8	15
	Participating	9	10
	Delegating	8	5
Post-Training DLS	Telling	2	21
	Selling	1	3
	Participating	1	1
	Delegating	3	2
Post-Experience DLS	Telling	2	10
	Selling	0	2
	Participating	0	1
	Delegating	1	3

Finally, the researcher examined gender differences with respect to change in dominant style, measuring change by *yes* or *no* responses from pre-training to post-training ($n = 34$) or post-training to post-experience ($n = 19$). Again, no significant gender differences in change of dominant leadership style from pre-training dominant leadership style to the post-training, $\chi^2 = .174, p = .676$, two-tailed, or from post-training to post-experience, $\chi^2 = .036, p = .849$, two-tailed, were found (see Table 12

Table 12

Change in Dominant Leadership Style by Gender

		Male	Female
Dominant Leadership Style (DLS)	Telling	22	28
	Selling	8	15
	Participating	9	10
	Delegating	8	5
Δ DLS From Pre-Training to Post-Training	No Change	2	10
	Change	5	17
Δ DLS From Post-Training to Post-Experience	No Change	1	8
	Change	1	6

Degree

The next demographic area of study was the enrollment of student participants in an outdoor recreation degree program at their universities. This dichotomous variable was characterized as *yes* or *no*. Similar to the previous analysis, the total number of participants varied in each stage of the study depending on the number of completed surveys in pre-training ($n = 94$), post-training ($n = 32$), and post-experience ($n = 18$). For each stage, a t test of independent samples was completed to determine if a relationship had occurred between seeking an outdoor recreation degree and not seeking such a degree and SLAS at any stage of the experiment. No statistical outdoor recreation degree difference was found in SLAS at pre-training, $t(94) = .60, p = .552$, two-tailed; post-training, $t(32) = -.02, p = .982$, two-tailed; or post-experience, $t(18) = .47, p = .647$, two-tailed (see Table 13).

The researcher also examined outdoor recreation degree change of SLAS using t tests of independent samples, measuring the change in SLAS from pre-training to post-training ($n = 32$) and post-training to post-experience ($n = 15$; see Table 13).

Table 13

*The Effect of Seeking an Outdoor Recreation Degree on Situational Leadership Awareness**Scores (SLAS)*

	No Outdoor Recreation Degree			Outdoor Recreation Degree			<i>t</i>	<i>p</i>
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>		
Pre-Training SLAS	94	29.35	3.21	12	28.75	3.93	.60	.552
Post-Training SLAS	32	28.94	3.91	2	29.00	1.41	-.02	.982
Post-Experience SLAS	18	29.44	3.01	1	28.00	0.00	.47	.647
Δ SLAS From Pre-Training to Post-Training	32	-.34	3.62	2	-3.50	3.54	1.20	.240
Δ SLAS From Post-Training to Post-Experience	15	1.07	3.19	1	-2.00	0.00	.93	.368

The researcher conducted a concluding analysis of enrollment differences in an outdoor recreation degree on the dominant leadership style and change in dominant style using the chi-square test of independence. No significant differences were found in dominant leadership style, $\chi^2 = 1.96$, $p = .582$, two-tailed; dominant style change from pre-training to post-training, $\chi^2 = 1.16$, $p = .282$, two-tailed; or post-training to post-experience, $\chi^2 = 1.371$, $p = .242$, two-tailed (see Table 14).

Table 14

Change in Dominant Leadership Style Compared to Seeking an Outdoor Recreation Degree

		No Outdoor Recreation Degree	Outdoor Recreation Degree
Dominant Leadership Style (DLS)	Telling	44	7
	Selling	22	1
	Participating	16	3
	Delegating	12	1
Δ DLS from Pre-Training to Post-Training	No Change	12	0
	Change	20	2
Δ DLS from Post-Training to Post-Experience	No Change	9	0
	Change	6	1

Previous Outdoor Recreation Participation

The final demographic area examined under Research Question 3 was the effect of prior participation in an outdoor recreation program. Utilizing the same analytical processes used for the first two demographic variables, the effect of participants' prior participation using a t test of independent samples to measure statistical significance was measured. Group differences based on previous outdoor recreation participation was not significant in SLAS at any of the measurement points: pre-training, $t(106) = 1.04$, $p = .300$, two-tailed; post-training, $t(34) = -.84$, $p = .406$, two-tailed; and post-experience, $t(19) = 1.09$, $p = .292$, two-tailed (see Table 15).

The researcher also measured previous outdoor recreation participation differences with respect to change in SLAS. No significant differences were revealed from pre-training to post-training, $t(34) = -1.33$, $p = .192$, two-tailed, or post-training to post-experience, $t(16) = .76$, $p = .459$, two-tailed (see Table 15).

Table 15

The Effect of Prior Participation in a Collegiate Outdoor Recreation Program on Situational Leadership Awareness Scores (SLAS)

	No Prior Participation			Prior Participation			t	p
	n	M	SD	n	M	SD		
Pre-Training SLAS	23	29.91	3.46	83	29.11	3.23	1.04	.300
Post-Training SLAS	7	27.86	5.15	27	29.22	3.45	-.84	.406
Post-Experience SLAS	2	31.50	3.54	17	29.12	2.89	1.09	.292
Δ SLAS From Pre-Training to Post-Training	7	-2.14	3.18	27	-.11	3.68	-1.33	.192
Δ SLAS From Post-Training to Post-Experience	2	2.50	4.95	14	.64	3.05	.76	.459

After determining the lack of significant effect of prior participation in an outdoor recreation program on SLAS, the researcher examined the effect of this demographic identifier on the dominant leadership style of those participating in the study ($n = 106$) through a

chi-square analysis. Beyond simply testing the effect of prior participation on the dominant leadership style, additional chi-square analyses were conducted on the effects of prior participation on the change in dominant leadership style from pre-training to post-training ($n = 34$) and post-training to post-experience ($n = 16$). No significant relationship was found between the dominant leadership styles of the participants and the participants' prior experiences with a collegiate outdoor recreation program, $\chi^2 = 6.02, p = .111$, two-tailed. Also, no statistical relationship was found between the change in leadership style for participants from their pre-training dominant leadership styles to the post-training based on those who had prior experience with a collegiate outdoor recreation program, $\chi^2 = .174, p = .676$, two-tailed. Finally, no statistically significant relationship was found between the change in the dominant leadership style of an individual after training and after the experience based on the individual's prior experience with a collegiate outdoor recreation program, $\chi^2 = 2.94, p = .086$, two-tailed (see Table 16).

Table 16

Changes in Dominant Leadership Style Compared to Prior Participation in a Collegiate Outdoor Recreation Program

		No Prior Participation	Prior Participation
Dominant Leadership Style (DLS)	Telling	9	42
	Selling	9	14
	Participating	2	17
	Delegating	3	10
Δ DLS From Pre-Training to Post-Training	No Change	2	10
	Change	5	17
Δ DLS From Post-Training to Post-Experience	No Change	0	9
	Change	2	5

The final examination of the effect of prior participation in an outdoor recreation program on the SLAS utilized an adjusted data set that broke down prior participation into the following three categories: no prior participation, 1 year of prior participation, and 2 or more years of prior participation. The researcher compared each of the SLAS results within these new demographic categories for pre-training participants ($n = 106$), post-training participants ($n = 34$), and post-experience participants ($n = 19$) through an ANOVA analysis to determine if a statistically significant relationship existed. No statistical difference was found between the resulting SLAS and prior participation across all three categories from pre-training, $F(106) = .562, p = .572$, two-tailed; post-training, $F(34) = 1.055, p = .360$, two-tailed; or post-experience, $F(19) = .701, p = .511$, two-tailed (see Table 17).

The researcher also compared these same three categories of prior participation with the change in SLAS from pre-training to post-training ($n = 34$) and post-training to post-experience ($n = 16$). This test was used to determine if a relationship existed between the level of prior participation and the presence of a change in the level of SLAS for the participants. As with the previous results, the effect of prior participation on the change in SLAS, regardless of the amount, was not statistically significant from pre-training to post-training, $F(34) = .869, p = .429$, two-tailed, or post-training to post-experience, $F(16) = .483, p = .628$, two-tailed (see Table 17).

Table 17

Situational Leadership Awareness Scores (SLAS) by Level of Prior Participation

	No Prior Participation			1 Year Prior Participation			2+ Years Prior Participation		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Pre-Training SLAS	23	29.91	3.46	54	29.17	3.00	29	29.00	3.67
Post-Training SLAS	7	27.86	5.15	16	29.94	4.14	11	28.18	1.78
Post-Experience SLAS	2	31.50	3.54	10	28.80	2.97	7	29.57	2.94
Δ SLAS From Pre-Training to Post-Training	7	-2.14	3.18	16	-.19	3.33	11	0.00	4.31
Δ SLAS From Post-Training to Post-Experience	2	2.50	4.95	9	.22	2.95	5	1.40	3.44

Summary

The researcher examined the analysis of the data to answer the following three research questions:

1. Is field leadership more effective than formal staff training in creating situational leadership awareness?
2. Does formal staff training or field leadership create a change in the dominant situational leadership style of a student leader?
3. What are the major demographic influences on the dominant style of leadership for student outdoor leaders?

No significant relationship was found between the formal staff training or the field leadership experience while examining the improvement of the situational leadership awareness of the student participants. The analysis of the data also yielded results revealing that college students tend to have dominant leadership styles that are more task oriented and less relationally oriented; however, participation in formal staff training or field leadership experience does not affect this dominant style. Finally, while examining the effect of various demographics on the

SLAS of participants, no significant results were found. However, when the researcher compared the dominant leadership styles from pre-training, post-training, and post-experience by gender, a statistically significant result emerged that showed a dramatic shift in the dominant styles of the participants after training, which disappeared after the field leadership experience had concluded. Although prior participation in an outdoor recreation program was not found to be statistically significant, the results were close enough to encourage further examination and discussion.

These results provide an insight into the effects of various elements on an outdoor leader's situational leadership. The following chapter examines these results in more detail, offering greater explanation and potential areas for further examination.

CHAPTER V. DISCUSSION, CONCLUSIONS, AND IMPLICATIONS

Summary of the Study

Through the research conducted in this study, a number of interesting results emerged. The researcher found that the student participants leaned heavily toward a dominant style of Telling, which demonstrates more focus on task-based leadership than relational-based leadership. When the gender of the dominant leadership styles of individuals before formal training, after formal training, and after the field leadership experience were examined, the study showed statistically significant results. Although the results of the study demonstrated an understanding of the students' dominant styles, they did not show a significant relationship between the students' participation in the formal staff training or field leadership experience and the improvement of their situational leadership awareness. Finally, although there were no other statistically significant sources of demographic difference, prior participation in a collegiate outdoor recreation program did show potential significance.

The integrated leadership model (see Figure 1) did provide a functional framework for an examination of the role of the outdoor leader in a recreation setting. By examining the student's awareness of changing group attitudes, practices, and behaviors and combining this examination with a judgement on the appropriate style of leadership, the research demonstrated an application of the connection between the two models. Although this study solely focused on the quantitative application of the model, it could be expanded in the future through the combined use of qualitative and quantitative studies.

The following sections feature the results in the context of the theoretical framework outlined at the beginning of the paper. The discussion provides a thorough description of the resulting data, its connection to the theory, reasoning for the results, and potential areas for future research.

Dominant Leadership Styles of Student Outdoor Leaders

The initial analysis of the dominant leadership styles of students participating in the study showed a stronger emphasis on higher task-based leadership styles than relational-based styles. In fact, from all of the pre-training data, nearly 50% of all participants indicated that their dominant leadership style was Telling (i.e., high task, low relational). The next dominant leadership style was Selling at 22% (i.e., high task, high relational), with Participating (i.e., low task, high relational) and Delegating (i.e., low task, low relational) comprising the other 28%. From the previously outlined research, it was determined that the typical college student perceptions about leadership changed over time and through experience from a leader-centric approach (i.e., high task, low relational) to a more group-centric approach (i.e., high task, high relational; Komives et al., 2005). Because most of the study participants were in the second year of college and only the first year of participating in a collegiate outdoor recreation program, it is possible that these students had little leadership experience prior to their opportunities with the outdoor program. Essentially, the students leaned toward the leader-centric model because they had not gained the experience necessary to fully understand how to move to a group-centric model. The results of this study support this assumption because the dominant styles of these students mainly fell into high-task, low-relational, or leader-centric mindsets (Haber, 2012).

Effects of Gender on Dominant Leadership Styles

Only one significant gender difference was revealed in this study—the chi-square result for participant gender and dominant leadership styles at the conclusion of the formal staff training. While examining gender and the progression of dominant leadership styles before training, after training, and after the field leadership experience, the researcher found some interesting results. As previously discussed, there was a strong emphasis on the Telling style of leadership by students who participated in the study prior to the formal staff training. When the

results were broken down by gender, there was very little difference between the two genders (see Table 16). After the training concluded, there was a shift in the dominant leadership styles of the participants, with a statistically significant swing of the female participants becoming more task oriented and the male participants becoming more relationally oriented ($p = .049$). After the field leadership experience had occurred, the female participants became less task focused (i.e., they returned to a pre-training state), and the male participants become less relationally focused (i.e., they also returned to a pre-training state). Table 18 summarizes these results in percentages instead of raw numbers.

Table 18

Chi-Square Test of Dominant Leadership Styles Compared to Gender by Percentage

		% Male	% Female
Pre-Training Dominant Leadership Style (DLS)	Telling	46.81	48.28
	Selling	17.02	25.86
	Participating	19.15	17.24
	Delegating	17.02	8.62
Post-Training DLS	Telling	30.00	80.00
	Selling	20.00	10.00
	Participating	20.00	3.33
	Delegating	30.00	6.67
Post- Experience DLS	Telling	80.00	59.09
	Selling	00.00	13.64
	Participating	00.00	9.09
	Delegating	20.00	18.18

Table 18 shows that females shifted into high task-based, low relational-based styles of leadership after the conclusion of training while male participants shifted into higher relational-based styles of leadership after training. According to Haber (2012), female leaders tend to value highly relational skills more than male leaders do, indicating that female leaders score higher in high-relational leadership styles than their male counterparts do. In the case of

this study, female leaders became more task oriented, and males became more relational oriented after training had concluded.

A number of interesting questions remain about the effects of training on the leadership styles of participants. For example, what type of leadership style is ideal during training? Earlier results showed that the training did not significantly affect a student's ability to understand and utilize the various situational leadership styles, so one may assume that a single style or several styles were dominant during the training. Also, during the training, what caused female leaders to take on more task-based or authoritative roles while the male participants reversed to more relational roles? One explanation could be that leaders were attempting to expand their abilities to understand various leadership styles. The female leaders could have seen themselves as being too relational in a field traditionally dominated by male leaders and, therefore, attempted to take on more masculine leadership styles during training. Although this may explain the movement of female leaders into more authoritative approaches, it does not explain the movement of male leaders into more relational approaches. An explanation for this change could be the gaining popularity of the outdoor recreation industry for professional female leaders. Although the information is only anecdotal, recent outdoor leadership conferences for Midwestern United States students have seen participation rates at nearly 70% for females and only 30% for males. The trending of significant female leadership could be leading male leaders to take on a more typically female approach to leadership in order to interact in a positive way with other female leaders.

The final note regarding this data is the reverse of these trends after the field experience. After the conclusion of the field leadership experience, the male leaders tended to revert to a more task-based leadership style while the female leaders returned to a more relational style,

indicating that the leaders were falling back into more comfortable routines or stereotypical roles that participants in these outdoor recreation experiences may have been expecting. The participants in these experiences did not necessarily have the same experiences as the leaders did, so they may have been holding expectations similar to those that Haber (2012) and Komives et al. (2005) outlined. Without the additional experiences to change their perceptions, the participants' expectations could have played a role in the reversal of the trends seen after the formal staff training.

Effect of Formal Training and Field Leadership Experience

The effect of formal training and field leadership experience on the ability of students to more fully understand the concepts of situational leadership and put them into practice was minimal. The results showed no significant impact for either formal training ($p = .402$) or field experience ($p = .163$). Previous research has shown the appropriate elements of leadership, including an understanding of theoretical situations, build upon leaders' past experiences (Priest & Gass, 1997). Through the study of these experiences, including formal training and field leadership, researchers have identified many of the traits deemed necessary for outdoor leaders (Priest, 1987, 1988). For this study, there are a number of reasons for the discrepancy and the lack of effect that both training and experience had on the situational leadership awareness of students.

Priest (1988) developed a list of essential leadership skills, including an understanding of leadership theory, which a leader must obtain throughout the training process. The researcher in this study examined whether the participants applied this skill (i.e., an understanding of leadership theory) in the context of the formal training experience. The examination of the training process led to a number of assumptions. The first assumption was that formal leadership training utilizes a model that will cover an understanding of leadership theory as defined by

Priest. Although participants were asked if the training experience included a situational leadership component (90% replied yes; 10% were not sure), they were not asked whether other essential leadership skills were also offered. The assumption was made that each skill is learned independently of the other and that as long as the component is there, it must be learned, which does not take into account the experiences that students have during the formal training process that allow them to combine skills for maximum learning. For example, the situational leadership skill may be learned independently of the other skills through direct lesson, but it may be more effective to learn the skill while teaching or learning skills such as cooking or knot tying. Because this study did not examine the overlapping effects of different skill elements, it is possible that the situational leadership awareness skill was not significantly increased because another non-related skill was not taught that could have had a symbiotic relationship with situational leadership. A fuller understanding of all of the elements taught during the formal leadership trainings would help to create a clearer picture of the elements that may assist in transferring the situational leadership awareness skill.

Although the effects of both experiences were not significant, students did see greater gains as a result of the field experience in contrast to the formal staff training; the mean change in score for training equaled $-.59$, and the mean change in score for experience equaled 1.18 . In the field leadership experience, students were placed with others whom they had to lead. Unlike the formal staff training experience in which everyone was a leader learning alongside one another, the field leadership experience called for a student to take charge of a group of individuals looking for leadership. In this situation, the student leader had to be more aware of the group he or she was leading because the rest of the people were not leaders; they were followers. This makes for a more realistic situation for student leaders because they must begin

to observe and understand the varying dynamics of the group and adjust their leadership styles accordingly. Unlike a training experience in which there may be a very detailed and prescribed schedule of events, a field leadership experience is more dynamic and fluid, requiring leaders to adjust and practice skills of varying leadership styles demanded by the situation.

The results also show that, as a whole, the training did not have a significant impact on the change in dominant styles of individual student leaders, which can be attributed to the persistence of the dominant leadership style of the typical college student and his or her resistance to change. Haber's (2012) research showed that college students, in general, have a more leader-centric (i.e., task-oriented) leadership style, but over time, they can use a more group-centric style. College students in formal leadership positions tend to remain leader-centric over time and throughout their development as college students (Haber, 2012). Essentially, those in leadership roles tend to have greater persistence of their dominant leadership styles than those without formal leadership roles. Due to this persistence, it can be assumed that a single week of training may not be a significant enough experience to change the dominant style of an individual. In order to see change in the dominant leadership style through training, a longer or more intense experience may be necessary.

Prior Participation as an Indicator of Change in Dominant Leadership Style

Although the researcher found no significant group differences in students' prior participation in collegiate outdoor recreation programs and change in their dominant leadership styles ($p = .11$, $p = .086$), group differences were present. In the case of no prior experience, there was an even split in the dominant styles of both Telling and Selling, with 39.1% falling into each category. When compared with those who had prior experience with an outdoor program, 50.6% fell only into the Telling category, demonstrating a strong preference for those who had prior experience to lean toward a more dominant style of leadership than those without prior

experience. These results support previous research on collegiate leadership, specifically on students in formal leadership roles. Researchers have discovered that collegiate leadership is recognized for an emphasis on authoritative and task-based strategies (Haber, 2012; Komives et al., 2005). Although this trends toward a more relational perspective in the general college population as the students age, students who hold a formal leadership positions, such as a student outdoor leader (Komives et al., 2005), show a stronger presentation of the task-based leadership style as they develop, which the results of this study support. A number of reasons may explain this result. First, it is likely that with added experience in the field comes a greater understanding and knowledge. This study did examine the First Aid experience of the participants and found that 37 respondents indicated that they had a Wilderness First Responder certification (a significant certification in the outdoor recreation field requiring at least 80 hrs of study and costing up to \$600), and 27 respondents indicated that they had no First Aid training. One could assume that students just beginning their experiences with the program had not completed an intensive certification, resulting in little understanding of the riskier elements associated with outdoor recreation. Such an understanding of these elements would lead one to take a more authoritative approach in order to maintain the safety of those involved. Unfortunately, due to the small sample size, a thorough data analysis could not be conducted; however, this does lead to an interesting future examination to identify if there is a significant relationship between various skill-based trainings and the dominant leadership style of a leader.

Prior participation was also examined in relation to change in dominant leadership style of individuals after the field leadership experience. Although no significant group differences were found, some interesting trends were revealed. In the study, 100% of all participants who had no prior experience with a collegiate outdoor recreation program changed their dominant

leadership styles after the field leadership experience while only 35.7% of those with prior experience changed. Although Priest and Gass (1997) established that experiences do teach the fundamentals of leadership, these results show that there may be a limit to this effect, possibly due to those with experience having a greater understanding of the role of a leader within the context of an outdoor recreation experience. Prior experience with a program could also be used as a representation of participation in prior staff trainings and prior field leadership experiences. In both cases, prior participant experience would have lessened the likelihood of changing leadership styles because a dominant style had likely already been established. Participants without prior collegiate outdoor recreation program experience were still learning the process of becoming leaders and were most likely undergoing their first training experiences and possibly their first field leadership experiences. It was expected that these individuals were still adjusting their leadership styles in order to find what best fit them and which roles they were most comfortable performing.

Implications for Practice

Although few significant analytical results were obtained from the study, there were identifiable results that can guide practitioners working in an outdoor leadership field. The significant relationship established between gender and dominant leadership styles should lead to a re-examination of training practices for student outdoor leaders. Although female students in a college setting traditionally exhibit relational-based leadership compared to their task-based male counterparts (Haber, 2012), this stance is switched after a training experience; therefore, a trainer of student outdoor leaders may need to present alternative leadership opportunities. Alternative opportunities may allow student outdoor leaders to equally express both relational and task-based leadership, giving each student an opportunity to develop a more well-rounded and situationally aware leadership style. Although many leadership-training curriculums include discussion about

gender diversity, few examine its leadership potential. This research has shown that a relationship does exist between gender and changes in the dominant leadership style, therefore increasing its importance as a subject for study within the formal training process.

In conjunction with the development of outdoor leaders, those who manage programs must gain a greater awareness of the effects of their training programs on the dominant leadership styles of their staff members. If formal training programs are causing a shift in the leadership styles of the leaders based on gender, the directors of training programs must begin to ask why. Are certain elements of the training more beneficial to one who exhibits a task-based leadership style versus a relational style? Are there situations in which a relational leadership style is beneficial? In order to provide a training experience that is most effective, the directors of training programs must look to deliver experiences that encompass all aspects of leadership and give the student leaders balanced experiences so that they can use each style. With this approach, student leaders are better able to recognize the appropriate styles for given situations because formal training will provide the opportunity to develop all four styles instead of just one or two.

Although this study cannot prove that a significant relationship exists between formal staff training or the field leadership experience, during the examination of the students' situational leadership awareness, there was a stronger gain in awareness from the experience than training. Although not significant, it should encourage directors of collegiate outdoor recreation programs to spend time examining the opportunities given to student outdoor leaders to lead in field leadership settings rather than staff trainings. Many opportunities exist for program directors to organize simple leadership opportunities for students from early on in their program experiences. Opportunities include simple 1- or 2-day trips with a local overnight component,

co-leading extended trips with experienced staff, and the inclusion of guided trip opportunities early on in the collegiate experience. All of these experiences would give student outdoor leaders an early opportunity to begin to develop an awareness of how situations will determine the necessary leadership. The importance of the formal staff training should not be discounted, but the importance of putting student outdoor leaders into field leadership experiences as early as possible to assist them in gaining leadership development should receive more emphasis.

Finally, as student outdoor leaders begin to develop their sense of leadership, it is incumbent upon the directors of the outdoor recreation programs to ensure that the leaders maintain a well-rounded leadership they can adjust in all situations. Although, again, no significant result was present in the comparison of prior participation and dominant leadership style, there were differences in the comparative groups. The results showed a difference in the task-based leadership styles for those who had prior participation in outdoor recreation programs when compared to those who did not. For directors of outdoor recreation programs, this could be concerning because those who spend more time with the program may begin to rely more on a higher task-based leadership style than changing styles appropriate to the situation. In order to maintain student outdoor leaders who have a greater awareness and ability to use all leadership styles, directors must be willing to take definitive steps to appropriately train the leaders.

Training may include leadership training interventions for senior staff members who have spent more time than new staff members with the outdoor recreation program. These trainings could focus on the appropriate use of the task-based leadership styles with an emphasis on the need for and use of more relational-based strategies. An added focus by the director on these senior staff members may help to alleviate group differences in the dominant leadership styles presented by leaders of varying experience levels.

Limitations of the Study

The limitations of this study fall into four main areas: statistical power, concerns with the participant population, instrument content, and response bias. Although, overall, there were a total of 120 participants in the study, only 16 participants completed all three surveys. This low response can lead to a low statistical power in the ensuing analyses. The low statistical power may be the cause of many of the non-significant results and the calculations that could not be completed due to the low number of data points. In addition to the low statistical power, the lower number of data points could have led to the one statistically significant result (i.e., post-training dominant style by gender) as a result of chance or error due to the large number of statistical tests run on a small number of data sets. The significance level for the study utilized the generally accepted .05 level, although with the 14 different tests, there is a possibility that the end result was by chance. It should be noted that for the studies in which differences were seen but without statistical significance, the differences all fell within one standard deviation of the means.

Participants in this study were limited to self-selecting individuals from local university outdoor recreation programs in the Midwest. Due to the selective nature of the programs; lack of racial, ethnic, or sexual orientation diversity; and lack of regional diversity, the study results may be difficult to generalize to outdoor recreation programs with student-leader demographics that differ from those participating in the study.

Regarding the content of the instrument, a flaw emerged due to the lack of questioning about the leadership content of the formal staff training or the number of staff trainings in which student leaders may have participated. Further examination of outdoor recreation programs revealed that many only required formal staff training for first-year staff members and not for returning staff members; this caused many participants to be unable to complete all three

instances of the OLS survey. The lack of questioning about the leadership content of the formal staff training program also left the researcher to compare all trainings as equal when, in reality, many offered very different experiences for the participants.

Finally, it was difficult to obtain a cohesive data set with a large number of participants due to the nature of the experiment design. Although 106 participants completed surveys in total, only 17 finished all three instrument applications. The length of time between the post-staff-training and post-experience testing and the busyness after completion of the formal training could be factors in the lack of participation. Also, survey participants could have suffered from survey fatigue after completing the instrument for the third time, which could have resulted in changes in scoring.

Implications for Future Research

This study provided a look into leadership in outdoor recreation that was strongly driven by data. Although most previous research in this field has utilized qualitative measurement to examine and theorize about outdoor leadership, this study examined the phenomenon from a quantitative point of view. This change in approach came with both advantages and disadvantages. It did offer a novel approach to outdoor recreation research and provided new data for the body of work on outdoor recreation, but its focus on data caused a loss of richness that comes from a qualitative study. This observation led the researcher to recommend future approaches to this topic that utilize a mixed-methods approach to pull from the strengths of quantitative data collection and qualitative collection. Outside of the examination of the data-informed component of this study, there are further research implications.

In completing this study, the researcher determined a number of future directions for research in this field. First, a similar study utilizing the OLS with an ELSA component with a dedicated large outdoor recreation staff under the supervision of a director could yield more

thorough responses and results and could allow for a greater response rate and more data for a complete analysis. Second, a similar study could be conducted focusing on obtaining participation from a wider geographic location to compare results with those from Midwestern United States participants.

The researcher generated interesting results from this study regarding gender and outdoor leadership. These results support the argument for further study, including an examination of the leadership styles utilized by male, female, and transgender outdoor leaders and the experiences that have led to the use of these leadership styles. Use of a more qualitative or mixed-methods style of experimentation could yield a richer description of the process these leaders use to focus in on dominant leadership style.

Additionally, greater examination of the effect of prior participation in outdoor recreation on the dominant leadership style utilized by outdoor leaders is needed. In addition to examining the effect of leader participation in outdoor recreation programs, the researcher suggests that future research take a broader view to examine whether a relationship exists between prior recreation participation in outdoor-based experiences (not just leadership) and the leadership styles students eventually find dominant. This examination could yield results that influence the selection of future outdoor leaders in collegiate recreation programs or the types of experiences offered by recreation programs to increase interest and skill levels of those who may choose to become leaders.

Conclusion

Situational leadership awareness is an essential tool for outdoor leaders who seek to successfully provide outdoor recreation experiences to their participants (Breunig et al., 2010; Priest, 1987; Shooter et al., 2009). The development of leadership skills, such as situational leadership awareness, comes from both formal staff training and field leadership experience

(Priest, 1988). Although this study did not reveal a significant relationship between formal staff training or field leadership in creating situational leadership awareness, differences in the development of dominant leadership styles were found.

The researcher found a significant relationship between gender and the dominant leadership style of student outdoor leaders after the completion of formal staff training. Although the study reinforces the previous research of ingrained societal differences in leadership expectations based on gender (Wittmer, 2011) in pre-training and post-experience results, post-training results yielded findings contrary to popular research. These results should lead program directors to re-examine the presentation of leadership styles in their trainings to ensure a broad leadership education and not just a reinforcement of societal norms.

Although not found to be significant, greater change was seen in the student leaders' situational leadership awareness after the field leadership experience when compared to after the formal staff training. These results should encourage the examination of training and leadership development practices by outdoor program directors to include a greater concentration of field leadership experience early in the development process. Such a focus may allow for a more rapid development of the leadership understanding of new student outdoor leaders.

As leaders continue to develop and participate in leadership roles within outdoor recreation programs, they may experience changes in their dominant leadership styles. Although not found to be significant, differences were seen in the dominant leadership styles of those with prior participation in outdoor recreation program (i.e., they tended to be more task oriented) and those with no prior participation (i.e., they tended to be more relationally oriented). Program directors must remain vigilant in the development of their student outdoor leaders regardless of

the levels of experience they have within the program. In fact, program directors may need to take extra effort to maintain broader leadership abilities in senior staff members.

The results of this study give both future researchers and practitioners a basis for the development of impactful leadership development opportunities and research goals. Thus, the researcher seeks to develop well-rounded and situationally aware leaders who are capable of providing the best outdoor recreation experience possible for their participants.

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APPENDIX A INFORMED CONSENT

Informed Consent for Student Outdoor Leaders

Introduction: My name is Jerome Gabriel. I am a graduate student in the Leadership Studies doctoral program at Bowling Green State University under the supervision of Dr Rachel Reinhart. I am conducting research on the situational leadership awareness of student outdoor leaders in a university sponsored recreation program. I am inviting you to participate in this research because of your involvement as a student leader in an outdoor recreation program in the university setting. I am contacting you through your involvement with the Association of Outdoor Recreation and Education.

Purpose: The purpose of this research is to gain a greater understanding of the effectiveness of formal staff training versus field experience in the development of leadership skills in college outdoor leaders. While there are no monetary or similar rewards for participation in this survey, participants will be able to see the many different leadership options that are available to them in different situations in the outdoors. In the future this research will be used to help to develop leadership training programs to help student outdoor leaders develop skills more efficiently.

Procedure: Voluntary participation in this research will include taking a survey that measures your understanding of the changing leadership styles necessary for a group in various outdoor settings, which will take approximately 10 minutes and consists of 12 scenarios with some demographics questions. This survey will be given prior to a formal staff training, at the conclusion of that staff training, and after 7 days of field leadership. If you participate in all three surveys your total time committed to this research will be around 30 minutes.

Voluntary nature: Your participation is completely voluntary. You are free to withdraw at any time. You may decide to skip questions or discontinue participation at any time without penalty. Deciding to participate or not will not affect your standing within your outdoor program or your relationship with Bowling Green State University, your program director, or your school.

Confidentiality/Anonymity Protection: All data collected during this survey will be stored by the researchers on a password-protected computer in a locked office. The data will only be accessed by the lead researcher (Jerome Gabriel) and his chair/methodologist (Dr. Rachel Reinhart) to be used in the research on situational leadership awareness development. The demographic information that you provide will be used to link your responses from all three of the surveys should you choose to participate in all three. Once the responses have been linked all identifying information will be removed and replaced with a generic identification number to ensure confidentiality. Because of the online nature of these surveys it is important that you are aware that (1) some employers may use tracking software so you may want to complete your survey on a personal computer, (2) do not leave survey open if using a public computer or a computer others may have access to, (3) clear your browser cache and page history after completing the survey.

Risks: Due to the online nature of this survey there are minimal risks involvement with participation.

Contact information: If you have any questions regarding the research, the survey, participation or other aspects of this project please contact Jerome Gabriel (jeromeg@bgsu.edu) or Dr. Rachel Reinhart (rvanna@bgsu.edu). You may also contact the Chair, Human Subjects Review Board at 419-372-7716 or

hsrb@bgsu.edu, if you have any questions about your rights as a participant in this research. Thank them for their time.

I have been informed of the purposes, procedures, risks and benefits of this study. I have had the opportunity to have all my questions answered and I have been informed that my participation is completely voluntary. By clicking the YES link and continuing with this survey I agree to participate in this research.

APPENDIX B IRB APPROVAL



DATE: August 6, 2014

TO: Jerome Gabriel

FROM: Bowling Green State University Human Subjects Review Board

PROJECT TITLE: [575407-3] Situational Leadership Awareness Development in Student Outdoor Leaders through Training versus Experience

SUBMISSION TYPE: Revision

ACTION: DETERMINATION OF EXEMPT STATUS

DECISION DATE: August 6, 2014

REVIEW CATEGORY: Exemption category # 2

Thank you for your submission of Revision materials for this project. The Bowling Green State University Human Subjects Review Board has determined this project is exempt from IRB review according to federal regulations AND that the proposed research has met the principles outlined in the Belmont Report. You may now begin the research activities.

Note that an amendment may not be made to exempt research because of the possibility that proposed changes may change the research in such a way that it is no longer meets the criteria for exemption. A new application must be submitted and reviewed prior to modifying the research activity, unless the researcher believes that the change must be made to prevent harm to participants. In these cases, the Office of Research Compliance must be notified as soon as practicable.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Kristin Hagemyer at 419-372-7716 or khagemy@bgsu.edu. Please include your project title and reference number in all correspondence with this committee.

This letter has been electronically signed in accordance with all applicable regulations, and a copy is retained within Bowling Green State University Human Subjects Review Board's records.

APPENDIX C PRETRAINING DEMOGRAPHIC SURVEY

Outdoor Leadership Survey*Demographic Information*

1. **First Name** _____ **Last Name** _____

2. **Gender:** Male Female Transgender

3. **Age:** 17 18 19 20 21 22 23+

4. **Race** (Please mark one or more)

White	Black or African American	Hispanic
Asian	Native Hawaiian or Other Pacific Islander	
American Indian or Native Alaskan	Other	

5. **How many years have you been a college student?**

1	2	3	4	5	6	7+
---	---	---	---	---	---	----

6. **How many years have you worked with a college outdoor program?** _____

7. **Are you enrolled in an academic Outdoor Recreation or Leadership Degree?** YES NO

8. **Do you have a Wilderness First Aid certification?**

Wilderness First Aid (WFA)	Wilderness Advanced First Aid (WAFA)
Wilderness First Responder (WFR)	Wilderness Emergency Technician (WEMT)
First Aid (non-wilderness)	None

APPENDIX D POSTTRAINING DEMOGRAPHIC SURVEY

Outdoor Leadership Survey*Demographic Information*

1. **First Name** _____ **Last Name** _____

2. **Gender:** Male Female Transgender

3. **Age:** 17 18 19 20 21 22 23+

4. **Race** (Please mark one or more)

White	Black or African American	Hispanic
Asian	Native Hawaiian or Other Pacific Islander	
American Indian or Native Alaskan	Other	

5. **In days, how long was your trip leader staff training?**

1	2	3	4	5	6	7+
---	---	---	---	---	---	----

6. **Does your training have a situational leadership component?** YES NO NOT SURE

7. **Does your training utilize field experience outside of the standard classroom setting as part of the schedule?** YES NO NOT SURE

8. **Does your training utilize “leaders of the day”?** YES NO NOT SURE

APPENDIX E POST EXPERIENCE DEMOGRAPHIC SURVEY

Outdoor Leadership Survey*Demographic Information*

1. **First Name** _____ **Last Name** _____

2. **Gender:** Male Female Transgender

3. **Age:** 17 18 19 20 21 22 23+

4. **Race** (Please mark one or more)

White	Black or African American	Hispanic
Asian	Native Hawaiian or Other Pacific Islander	
American Indian or Native Alaskan	Other	

5. **How many field leadership days have you had since training?**

1-3	4-6	7-9	10-12	13-15	16+
-----	-----	-----	-------	-------	-----

6. **What is the longest number of consecutive days led since training? (i.e. 2 for a weekend trip, 7 for a week long trip)?** _____

7. **Did you have a co-leader?** YES NO NOT SURE

8. **On average, how many people were you leading?**

1-3	4-6	7-9	10-12	13-15	16+
-----	-----	-----	-------	-------	-----

The Expedition Leader Style Analysis Inventory (ELSA)

In the following twelve situations, assume that you are the leader or are assuming the leadership of the group. Choose which decision you would most closely describe YOUR behavior in the situation presented. Circle only one choice. Stay with the same group in your mind to enable consistency in your answers.

1. You have been initiating friendly conversation and showing concern for the group as individuals. Their performance is declining rapidly. YOU WOULD...

- | | |
|---|---|
| A. Discuss the goals and importance of task completion. | C. Talk over the problem with the group and set goals for them. |
| B. Wait for the group to formulate a solution and be prepared to give them direction. | D. Allow the group to carry on without interference. |

2. Your group is working efficiently, in fact they are doing considerably better than previous days and you need to meet deadlines. You have been checking individuals so that they understand what is expected of them. YOU WOULD...

- | | |
|---|--|
| A. Show camaraderie and continue to check that individuals understand what is expected. | C. Take steps to enhance feelings of belonging and importance. |
| B. Leave the situation alone, taking no action. | D. Stress time limits with regard to what needs to be done. |

3. An issue has arisen in the group concerning which geographic direction to take. They don't seem to be able to resolve this problem. The group has been functioning well and everyone has been getting on well together. Previously you have not interfered. YOU WOULD...

- | | |
|--|---|
| A. Explain to the group which way to go and why. | C. Immediately guide the group using a firm manner. |
| B. Leave it to the group to resolve. | D. Problem solve with the group. |

4. Because of extra difficult terrain and time restraints, you are considering a change in the expedition plan. The group is extremely capable and have been functioning well. They accept that the plans need to be modified. YOU WOULD...

- | | |
|--|---|
| A. Talk over the alternative plans but be as non-directive as you can. | C. Let the group decide what to do |
| B. Make a new plan and make sure the group follows it. | D. Encourage input from the group, but you choose and implement the change. |

5. During the final stages of the expedition, many of the goals haven't been achieved. Previously reminding the group on a continual basis about specific objectives has been effective. They have been acting unconcerned. YOU WOULD...

- | | |
|---|--|
| A. Leave it to the group to work out the problem. | C. Discuss the goals again and what is expected. Be directive. |
| B. Encourage input from the group, but make sure that you achieve some goals. | D. Explain that you want group involvement. |

6. The authoritative leader of the expedition has been evacuated, leaving you in charge. You are half way through the expedition. The expedition is functioning effectively. Without losing control of the group, you would like to create a more open communication climate. YOU WOULD...

- | | |
|--|--|
| A. Enhance the group's self-esteem. | C. Do nothing and allow the group to continue on its own. |
| B. Keep the focus on time lines and goals. | D. Ask for more group input but make sure the expedition objectives are met. |
-

The Expedition Leader Style Analysis Inventory (ELSA)

In the following twelve situations, assume that you are the leader or are assuming the leadership of the group. Choose which decision you would most closely describe YOUR behavior in the situation presented. Circle only one choice. Stay with the same group in your mind to enable consistency in your answers.

7. You are in the final stages of your expedition. You are thinking of making a change of plan. Members of the group have suggested a change of plan. The group responds well to trying different alternatives and they are fairly experienced expeditioners. YOU WOULD...

- | | |
|---|--|
| A. Decide and organize the change yourself. | C. Be open to suggestions, but retain the authority to execute the plan. |
| B. Use a participatory style in deciding the change, but allow the group to execute the plan. | D. Let the group make the change of plan. |

8. The group understands the responsibilities and members are showing good capabilities. There is a high-level of camaraderie in the group. You are concerned about your own seemingly lack of direction. YOU WOULD...

- | | |
|---|--|
| A. Leave them alone. | C. Obtain tighter control by restructuring procedures. |
| B. After getting input from the group, initiate changes that you think are necessary. | D. Discuss the situation with your group but give as little direction as possible. |

9. Expedition Behavior in the group (group norms - expected behaviors) is extremely unsatisfactory. The group has been together a very short time. Goals are not clear and cliques are developing. YOU WOULD...

- | | |
|---|---|
| A. Leave it to the group. | C. Discuss the goals and be directive. |
| B. Ask for input from the group, but push to meet objectives. | D. Involve the group in goal setting, but be non-directive. |

10. The punctuality standards on your expedition have been declining. Even though your group normally demonstrates responsibility, they are not reacting to your directions regarding these standards. YOU WOULD...

- | | |
|--|--|
| A. Encourage the group to discuss the standards. | C. Do not push the issue at this time. |
| B. Refresh the group about the standards and enforce them. | D. Ask for input from the group, but ensure that the standards are followed. |

11. The leader, who allowed the group to perform on its own, has been incapacitated and has asked you to assume direction of the group. Relationships in the group are good and goals are being met but only adequately. YOU WOULD...

- | | |
|--|--|
| A. Be directive and define goals and objectives. | C. Call a meeting to examine past accomplishments then you determine whether a change is needed. |
| B. Solicit input from the group members and support quality input. | D. Continue to allow the group to perform on its own. |

12. The group has become aware of an interpersonal conflict. Until this time the group has maintained high morale, and they are highly mature expeditioners and understand interpersonal relationships and group dynamics. YOU WOULD...

- | | |
|--|--|
| A. Identify the problem for the group, then suggest what they should do. | C. Take steps to correct the situation quickly by directing the group. |
| B. Leave the group to work it out. | D. Be supportive and participate with the group in finding a solution |

APPENDIX G UPDATED ELSA SCORE SHEET

1

Check your selected letters for each question here, then add

2

Total the rows here

Situations

	1	2	3	4	5	6	7	8	9	10	11	12	
A	D	C	B	C	B	A	C	C	B	A	C	Q1	
C	A	A	D	B	D	C	B	B	D	C	A	Q2	
B	C	D	A	D	A	B	D	D	A	B	D	Q3	
D	B	B	C	A	C	D	A	A	C	D	B	Q4	

3

Transfer

Situational Leadership Style Range

Blue	Orange
Q3	Q2
Q4	Q1
Pink	Green

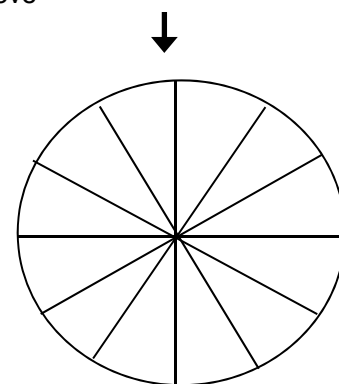
5

Transfer your selected letters from the top box to the bottom box

4

Shade the number of segments in the pie below to correspond with your scores in the quadrants above

	1	2	3	4	5	6	7	8	9	10	11	12		
Not a good choice	D	B	C	B	A	C	A	C	A	C	C	C	x1	
Some improvements	B	D	B	D	D	B	C	B	D	B	A	A	x2	
Better choice	C	C	A	A	B	A	D	D	B	A	D	D	x3	
Best choice	A	A	D	C	C	D	B	A	C	D	B	B	x4	
													Total out of 48	



INSTRUCTIONS

Circle your answers in both boxes.

In the top box, total each row and put the number in the right hand boxes.

Transfer your scores to the corresponding quadrants of the Situational Leadership® Style Range box and transfer this data to the pie by shading the segments.

How balanced is the pie chart?

What styles do you need to practice? What styles do you need to use less?

In the bottom box, note the corresponding numbers and compare these to the Situational leadership Style Range box to ascertain the style used. Why were these styles not the best? Consider this in relation to "readiness" or "maturity" levels, the situation, task and relationships, and the different leader styles.
