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THE LIFE EFFECTIVENESS OF WILDERNESS ADVENTURE LEADERS

by

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A Thesis
Submitted in Partial Fulfillment of the Requirements for the
Master of Science in Education Degree

Department of Health Education and Recreation
in the Graduate School
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THESIS APPROVAL

THE LIFE EFFECTIVENESS OF WILDERNESS ADVENTURE LEADERS

By

Cory Maria Dack

A Thesis Submitted in Partial

Fulfillment of the Requirements

for the Degree of

Master of Science in Education

in the field of Recreation

Approved by:

Dr. Whitney C. Ward, Chair

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AN ABSTRACT OF THE THESIS OF

CORY MARIA DACK, for the Master of Science in Education degree in RECREATION, presented on May 14, 2010, at Southern Illinois University Carbondale.

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MAJOR PROFESSOR: Dr. Whitney C. Ward

This study was conducted to examine the effect being a wilderness adventure leader has on overall life effectiveness. Currently, there is an abundance of research on the positive benefits wilderness adventure participants receive. There is very little research, however, that focuses on the positive benefits experienced by wilderness adventure leaders. One purpose of this study was to fulfill that need. Research participants were employees of YMCA Camp Menogyn, Camp Vermilion, and Camp Hiawatha during the summer of 2009. All research participants were employed as wilderness adventure leaders for the summer, and all were over the age of 18. Life Effectiveness Questionnaires (LEQs) were given to research participants both at the beginning of the summer, and at the end of the summer in an effort to measure life effectiveness quantitatively. In order to gather qualitative data, a short answer survey was also given to participants with the post-summer LEQs. An analysis of the quantitative data showed that LEQ scores did increase over the course of the summer with a moderate effect size, although statistical significance was not reached. Qualitative data revealed testimonies from employees who stated, among other things, that working as a wilderness adventure leader was a positive, life-changing experience.

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For someone who used to hate research with a passion, it is interesting to reflect on how much I have enjoyed writing this thesis. I didn't learn to love research on my own, however. Without the support and guidance of Dr. Whitney Ward, I would probably still be throwing a fit over having to do a literature review. Thank you, Whitney, for teaching me the value of research, and the importance of choosing to study something you are truly passionate about. You have been a great mentor, advisor, and friend these past two years.

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level they have always appreciated it. I must have learned something from them by osmosis at the very least, for I now treasure the sacred spaces found in nature as deeply as I have ever treasured music and literature. Your unending belief in my ability to do anything I put my mind to has been a continuous source of strength for me. Thank you, for supporting me through my entire wilderness journey.

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"Life has no limit / If you're not afraid to get in it." – Mason Jennings

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CHAPTER ONE

INTRODUCTION

The call of the wild has long been accepted as a true phenomenon by mankind. Throughout history countless scores of women and men have written novels, poems, and symphonies inspired by the ubiquitous reach of nature. As Sigurd Olson once wrote, "Wilderness to the people… is a spiritual necessity, an antidote to the high pressure of modern life, a means of regaining serenity and equilibrium" (Olson & Backes, 2001, p. 61). Eventually, musings on the powerful effects of nature branched out from the realm of artistic expression and began to take root in the domain of science and research. As the academic world began purposefully to explore and research the positive effects nature has on those who immerse themselves in the wilderness, recreationalists became more interested in preserving and experiencing nature at its most primitive. These movements, coupled with the establishment of experiential education, led to the inception of wilderness adventure programming.

Wilderness adventure programs can be recreational, educational, developmental or therapeutic in purpose (Hans, 2000). The programming can range from an afternoon of recreation in a city park, to a week-long stay at a summer camp, to a 45-day backpacking trip through the Arctic. Whatever the level or duration of the program, potential participants are often attracted to wilderness adventure programming by the promise of both great adventure and personal growth. Current literature shows that a great deal of time and effort has been spent researching, testing, and measuring the scope

of benefits participants receive after completing a wilderness adventure program. While most of the research has shown that participating in a wilderness adventure program increases the self-confidence, self-esteem, self-efficacy, and overall life effectiveness of participants (see Caulkins, White, & Russell, 2006; Goldenberg, McAvoy, & Klenosky, 2005; & Hattie, Marsh, Neill, & Richards, 1997), there is a deficit of research on the benefits and outcomes for those who guide or lead wilderness experiences. As a consequence, there exists relatively little knowledge of how wilderness adventure programming affects the human mind, body, and spirit.

This study will examine whether wilderness adventure leaders experienced an increase of life effectiveness after a summer of employment at a wilderness adventure camp. To accomplish this, both trail guides and camp counselors were studied. Research participants came from three different summer camps: Camp Hiawatha, Camp Vermilion, and Camp Menogyn. Camp Hiawatha and Camp Vermilion are both owned and operated by Voyageurs Lutheran Ministry (VLM), an organization that offers Christian outdoor adventures for children and teenagers. Campers may participate in a variety of week-long in-camp programs or a week-long canoe trip in the Boundary Waters Canoe Area Wilderness. Although VLM canoe guides work almost exclusively for Camp Vermilion, VLM camp counselors work at both Camp Hiawatha and Camp Vermilion alternatively throughout the summer (Voyageurs Lutheran Ministry, n.d.). Camp Menogyn, a tripping camp that is owned and operated by the YMCA, offers trail-based wilderness adventures for teenagers between the ages of 12 and 18. The employees of Camp Menogyn are comprised primarily of canoe guides, backpacking guides, and rock-climbing guides. Campers participate in wilderness adventures on trail that last anywhere from eight days

to fifty days (YMCA Camping Services, 2008). Both camps are located in Northern Minnesota, in close proximity to the Boundary Waters Canoe Area Wilderness.

Purpose of Study

The purpose of this study is to add to the existing research that focuses specifically on the outcomes experienced by those who work for wilderness adventure programs. Additionally, this study will examine the differences between the overall life effectiveness of summer trail guides as compared to that of in-camp counselors. Finally, this study will compare the overall life effectiveness of first-year wilderness adventure leaders to that of returning wilderness adventure leaders.

Research Questions

For the purpose of this study, the term "wilderness adventure leader" will refer to both trail guides and in-camp counselors. With this in mind, the proposed research was based off of the following research questions:

1. Do wilderness adventure guides experience an increase in life effectiveness after guiding wilderness adventure trips over the course of one summer?
2. Do camp counselors experience an increase in life effectiveness after working at a summer camp over the course of one summer?
3. Is there a difference between the life effectiveness reported by in-camp counselors compared to the life effectiveness reported by trail guides?

Delimitations

The current study is based on the following delimitations as set forth by the researcher:

1. Trail guides and camp counselors employed by YMCA Camp Menogyn and Voyageurs Lutheran Ministry during the summer of 2009 will be studied.
2. Trail guides at Camp Menogyn will only lead canoeing, rock-climbing, or backpacking adventures.
3. Trail guides for Voyageurs Lutheran Ministry will lead only canoeing adventures.
4. One summer of guiding will be assessed.
5. Staff participating in research are all 18 years of age or older.

Limitations

The following limitations apply to the present study:

1. Scheduling variance of the guides and camp counselors may make acquiring post-tests at the end of the summer problematic.
2. As the researcher will spend much of the summer on trail as a Camp Menogyn guide, it will not be possible for the researcher personally to hand out and collect data from the VLM camp counselors and canoe guides.
3. The data will be limited as it is collected in the form of self-reported questionnaires and the respondents may have a positive bias.
4. There may be a positive response bias from the research participants at Camp Menogyn, as the researcher will personally hand out surveys at that location.

Definitions of Terms

1. Developmental Wilderness Adventure: Programming that focuses on participant behavior change (Hans, 2000).
2. Educational Wilderness Adventure: Programming that focuses on changing the way participants think (Hans, 2000).
3. Emotional Intelligence: The ability to understand, relate to, and empathize with others (Salovey & Mayer, as cited in Hayashi & Ewert, 2006).
4. Experiential Education: An educational method that prefers hands-on learning to more conventional teaching methods (Prouty, Panicucci, & Collinson, 2007).
5. Life Effectiveness: “A person's capacity to adapt, survive and thrive” (Neill, 2007, p.1); the perception a person has of his or her ability successfully to function in life (Neill, as cited in Sibthorp & Arthur Banning, 2004).
6. Outcomes: The changes felt or perceived by research subjects post-experience; the results of the study (Malkin & Howe, 1993).
7. Positive Psychology: The process of encouraging personal growth through positive reinforcement instead of through stress, tension, and anxiety (Berman & Davis-Berman, 2005).
8. Recreational Wilderness Adventure: Programming that focuses on changing the way participants feel (Hans, 2000).
9. Self-efficacy: The perception a person has of his or her ability to do something successfully (Sibthorp, 2003).
10. Therapeutic Wilderness Adventure: Programming that focuses on changing the negative behavior and attitudes of participants (Hans, 2000).

11. Wilderness Adventure Programs: Outdoor excursions, trips, or experiences; purposeful programming set in the wilderness (Prouty, Panicucci, & Collinson, 2007).
12. Wilderness First Responder (WFR): The highest level of non-EMT wilderness medical training. A great emphasis is put on how to handle a medical emergency while in remote areas far from hospitals and other forms of urban medical care (Wilderness Medical Associates, 2009).

CHAPTER TWO

REVIEW OF LITERATURE

Introduction

Although there are varying differences between the true definitions of "wilderness adventure programming," "outdoor recreation," and "wilderness/adventure therapy," all three terms are often viewed synonymously. This is somewhat appropriate, as each falls under the umbrella of experiential education, and all are purported to provide a myriad of mental, physical, and spiritual benefits to participants of varying demographics. Current literature reveals that an abundance of research indicates positive participant outcomes after a wilderness adventure program, whether as a form of therapy or for purely recreational purposes. This literature review will thoroughly review existing research, and in doing so will (a) reveal a need for further research on the development of outcomes for persons that lead or guide wilderness adventure programs, and (b) review current trends in research that focus specifically on the way in which participant outcomes are acquired.

Wilderness Therapy

Much of the research done on the participant benefits of wilderness adventure programming falls under the category of wilderness therapy. The positive outcomes of wilderness therapy are relevant to this paper because wilderness therapy can be thought of as a sub-category of wilderness adventure programming (Hans, 2000). The benefits experienced as a result of participating in therapeutic wilderness programs can also be

realized through wilderness adventure programming that is recreational, educational, or developmental.

A great deal of attention has converged on the area of wilderness therapy as it continues to gain popularity as an alternative form of intervention for at-risk youth. Researchers have deemed wilderness therapy benefit analysis as important not only to prove wilderness therapy's effectiveness, but to deter current misconceptions about wilderness therapy's definition, purpose, and methods. Wilderness therapy is occasionally misconstrued as a type of wilderness boot camp, where youth are first broken down and eventually built back up through a series of stressful situations. In conjunction with this line of thought, wilderness therapy is also sometimes seen as a poorly regulated, understaffed, and ill-prepared therapeutic alternative that gives little thought or consideration to program outcomes (Russell, 2001). Contrary to this misconception, most wilderness therapy programs are staffed by highly trained counselors, psychologists, and experienced wilderness guides (see Autry, 2001; Caulkins et al., 2006; and Larson, 2007). The current amount of research done on the effectiveness of wilderness therapy also dispels the myth that programs are unconcerned with outcomes. The results of many of these studies highlight the positive outcomes for participants completing a wilderness therapy program.

Positive Outcomes Found in Wilderness Therapy

A study by Caulkins et al. (2006) identified several positive outcomes due to the presence of physical exercise in a wilderness therapy program developed for troubled adolescent women. After identifying a need for more research on the effects of

wilderness therapy on girls, Caulkins et al. focused their study on six troubled adolescent females and the three female wilderness guides who oversaw their wilderness therapy program. Through a combination of interviews, participant observation, and a careful study of written reflections by clients and guides, a number of positive outcomes were derived from a series of general impacts and substantive impacts. General impacts, which were identified as impacts that became apparent early on in the process and were easy for the participants to articulate, revealed reflection during the long and physically difficult hikes to be a catalyst for increased perceived competence and sense of accomplishment for participants (Caulkins et al.). An example of this perceived competence becomes evident in a quotation from one of the participants, whom the authors referred to as "Cassidy:"

> I always thought I couldn't run a mile. I was always the girl who walked in P.E. [physical education]. I can guarantee you that if you put me on a track, I can run a mile now. I mean, I hiked 53 miles, I can run a mile! (Caulkins et al., p. 29)

The substantive impacts were identified by the authors as impacts that became manifest later on in the program. These were more difficult for the participants to put into words, due to greater impact intensity. Increased self-efficacy, a profound sense of timelessness, further development of empathy, and increased awareness of self, surroundings, and others were all labeled as substantive impacts. A participant by the pseudonym of "Fawn" expressed her personal increase in self-efficacy:

> I don't doubt myself as much and… from the hiking I've set like really high goals for myself when I come back home. Because I never thought I

> could do it. And I can do it, so why can't I do other things? (Caulkins et al., p. 30)

Caulkins et al. state that this quotation reveals how Fawn's successes through backpacking are liable to carry over into other areas of her life. This transferability, in conjunction with the other benefits listed above, reveals how wilderness therapy can offer participants benefits that are both short-term and long-term in nature.

Other studies on the positive effects derived from physical activities in an adventure therapy program reinforce the findings of Caulkins et al. The effects of adventure therapy as a combined element with cognitive-behavioral group treatment for overweight adolescents was the focus of a pilot study done by Jelalian, Mehlenbeck, Lloyd-Richardson, Birmaher, and Wing (2006). Quantitative data centering on the varying degrees of weight loss and gain by the overweight adolescents was used to determine if adventure therapy helped the participants lose more weight than their aerobic-exercise-only participant counterparts. Both groups of participants were exposed to the same type of cognitive-behavioral treatment. The only difference was that one group of participants engaged in regular aerobic exercise instead of adventure therapy activities. The results indicated that the older adolescents in the peer-enhanced adventure therapy group lost more than four times the weight lost by the their peers in the aerobic-exercise-only group (Jelalian et al.).

A study by Russell and Phillips-Miller (2002) revealed four different aspects of wilderness therapy that yielded positive changes within the adolescents who completed varying wilderness therapy programs. Participants in this study were youth between the ages of 13 to 17. All were labeled as having severe behavioral problems, and

consequently were enrolled in wilderness therapy treatments that included wilderness expeditions averaging 38 days in length. The on-site researcher spent between seven and ten days in the field observing the clientele as a covert observer. Based on researcher observations and follow-up interviews with the participants, it was found that several main themes resulted in positive changes in participant behavior. Russell and Phillips-Miller identified these themes as: "(a) relationship established with counselors and leaders, (b) peer dynamic, (c) facilitated reflection on life through use of solo, and (d) challenge and structure of process" (p. 422). Fueled by these wilderness therapy born themes, participants exhibited desires to become drug-and-alcohol-free, and to be "better" people overall (Russell & Phillips-Miller).

Varying Outcomes Found in Wilderness Therapy

Although the scope of literature that analyzes wilderness therapy benefits is wide and far-reaching, not all studies have found wilderness therapy to be entirely effective. One such study focused on how adventure therapy benefited nine at-risk girls between the ages of 13 and 18. Autry (2001) gave in-depth interviews to each girl who completed the prescribed adventure therapy programs, which included high and low ropes course initiatives and a four-day backpacking trip. Upon completion of the analysis of the qualitative data yielded, Autry found several recurring positive outcomes. Each girl interviewed identified the hiking trips and the ropes courses as being integral to a positively changed sense of self. These activities also influenced the girls to increase their appreciation in such values as teamwork, trust, and empowerment. However,

several of the girls also revealed that they were unsure how to apply what they gained from the initiatives throughout their regular day-to-day routines (Autry).

A study on the effect adventure camp programs had on the self-concept of behavioral problem adolescents also revealed the imperfections that can be found in wilderness therapy programs. Larson (2007) selected 61 behavioral problem male and female adolescents between the ages of 9 and 17 years old for this study. To measure the effect the adventure camp programs had on the adolescents' self-concept, Larson administered the Piers-Harris Children's Self-Concept Scale (PHCSCS) to assess how the children felt about themselves. The PHCSCS was selected because it adequately measures how a child views his or her own happiness and satisfaction, intellectual and school status, popularity, anxiety, behavior, and physical appearance/attributes (Larson). The group of children with behavioral problems who attended an adventure camp was compared to a control group made up of children with behavioral problems who underwent conventional treatment for behavioral problems. The results of the PHCSCS showed an increase in the self-concept of children ages 9-to-11 who participated in the adventure camp, in comparison with the 9-to-11-year-olds in the control group. However, there was no significant difference in the adventure camp attending adolescents in the 12-to-14-year-old group and the 15-to-18-year-old group when compared to their same-age counterparts in the control groups (Larson). However, this is not to say that the adventure camp did not increase the self-concept in those participants: there was a significant difference found within the experimental 12-to-14-year-oldgroup. This finding suggests that the adventure camp therapy worked better than conventional therapy for the adolescents in the 9-to-11-year-oldage group, worked at least as well as

conventional therapy for the adolescents in the 12-to-14-year-oldgroup, and had no significant difference at all when compared to the relevant control group for the 15-to-18-year-olds. Based on these findings, the study offers support to the idea that adventure camp therapy may work better for younger participants than for older. Nonetheless, this idea is not set in stone, as its finality is refuted by the author, who offers several explanations for the discrepancies of increased self-concept amongst the three age groups. Larson explains that studies in the increase of self-concept in troubled youth may be better observed through programs of a longer duration than the programs observed in this study. Additionally, self-concept is thought to be a stable construct that is not easily changed (Purkey, as cited in Larson). As self-concept is developed early in life, it is harder for older adolescents to change their ideas of self-concept than it is for younger adolescents to do so. Finally, it is suggested that a significant difference in the self-concept of the older children in comparison to the older children in the control groups may have been discovered had the control group adolescents not been enrolled in conventional treatments for behavioral problems (Larson).

The above study shows that there are benefits when wilderness adventure programs are used as an alternative to traditional forms of therapy. Still, the study also shows that the existence of benefits does not automatically make wilderness therapy an across-the-board cure-all. One particular research paper even goes as far as to test out the idea that wilderness therapy is a “magical cure” for youth at risk. Drawing upon research previously done within Operation Flinders, a wilderness therapy program located in Australia, Raymond (n.d.) discusses a multitude of positive outcomes found within Operation Flinders participants. Some of these outcomes include support that wilderness

therapy reduces a marginalized youth's risk of becoming lost within the Australian educational system. There was also relational evidence that wilderness therapy may positively influence the behavioral and psychological outcomes of at-risk youth while also reducing their chances of becoming a future criminal (Raymond). Yet, within all of these benefits there exists a stipulation that cannot be ignored: not all participants experience an equal amount of positive outcomes after going through wilderness therapy. Because some participants may experience very small measures of positive outcomes, Raymond declares that wilderness therapy is not, in fact, a "magical cure" for troubled youth. However, it must be noted that while wilderness therapy is dismissed as a perfect cure for marginalized youth, the author does emphasize that the existence of positive benefits for most of the youth who go through wilderness therapy programs are enough to merit wilderness therapy as a worthwhile option for those who seek alternative methods when working with troubled youth (Raymond).

General Wilderness Adventure Programs

Similar to the vast scope of investigations done on the positive participant benefits found as a result of wilderness therapy is the scope of research on the positive effects wilderness adventure programs have on youth who are not enrolled in the outdoor adventure programs as a form of behavior intervention. In general, wilderness adventure programs can be characterized as recreational programs, educational programs, developmental programs, or therapeutic programs (Hans, 2000). Hans offers useful definitions: "*Recreational programs* focus on changing the way people feel, *educational programs* focus on changing the way people think, *developmental programs* focus on

changing the way people behave, and *therapeutic programs* focus on changing the way people mis-, or *mal*behave", p. 34). As research on therapeutic programs has already been discussed, the rest of this review will concentrate on the research done on wilderness adventure programs that exist for either recreational, educational, or developmental purposes.

Positive Outcomes Found in Wilderness Adventure Programs

Longstanding outdoor adventure schools such as Outward Bound and the National Outdoor Leadership School (NOLS) offer researchers insight into the way participants benefit from the aforementioned types of wilderness adventure programming. A study by Goldenberg, McAvoy, and Klenosky (2005) used the different components found in Outward Bound courses to identify the ways in which participants came to experience positive outcomes upon completion of various educational and developmental Outward Bound programs. During the summer of 2001, questionnaires were distributed to 216 participants, ages 14 to 66, who finished a North Carolina Outward Bound School course that summer. There were 207 questionnaires returned. The majority of these participants completed courses that lasted anywhere from 14 to 21 days. The questionnaires were comprised of open-ended questions asking participants to identify benefits they perceived to have received as a result of completing their Outward Bound course. Additionally, the questionnaires went on to request that participants explain why the benefits they chose were important to them. Participants identified 799 positive outcomes in total, with each participant identifying as having experienced an average of 3.7 outcomes (Goldenberg et al.). The authors stated that the most commonly listed outcomes showed an increase in

"physical fitness (listed by 34.7% of the study participants), followed by relationships with others (20.8%), self-confidence (19.9%), self-reliance (16.7%), appreciation (16.7%), teamwork/cooperation (15.7%), personal growth/challenge (15.7%), and knowledge/awareness (15.3%)" (Goldenberg et al., p. 131). The different wilderness components of the Outward Bound courses, such as rock-climbing or canoeing in groups, were specifically mentioned as playing an integral part in the participants' feelings of connectedness to others. The personal successes of each participant as they learned and mastered various wilderness skills were found to be connected to participants' increased sense of self-concept. Overall, the study revealed that wilderness adventure components can offer a wide range of diverse positive outcomes for large numbers of voluntary participants.

Holman and McAvoy (2005) found a similar set of positive outcomes when they collected questionnaires from and conducted interviews with participants who had completed a wilderness adventure program. Qualitative data were collected through 29 different phone interviews with willing participants, and quantitative data were synthesized by analyzing 193 sets of questionnaires completed by participants at the conclusion of their trips. Of these 193 questionnaires, 74 participants identified themselves as having a disability. It was found that the wilderness adventure programs offered numerous benefits for participants, including the successful acquisition of new skills, an increased awareness and appreciation of nature, the development of relationships with others, the availability of new opportunities, and a perceived increase in the understanding of self (Holman & McAvoy). Additionally, participants with disabilities specifically listed "success in the face of personal challenges" as an important

recurring outcome. It was also perceived that the participants were able to transfer the benefits they had experienced on trail to other areas of their lives. Holman and McAvoy found that participants listed “work” (41%) as the area most likely to benefit from this transference, with “family” (24%) and “the improvement/future development of outdoor skills” (24%) coming in second. These findings afford substantial support that wilderness adventure programs can offer benefits that transfer into long-term positive outcomes.

In one of the few studies that focused on the positive outcomes experienced by wilderness adventure trip guides and leaders, Hayashi and Ewert (2006) discovered that outdoor leaders tended to have high levels of emotional intelligence and were more likely to be transformational leaders. Transformational leadership refers to leaders who essentially help individuals increase their emotional intelligence, which in turn helps the individuals to better both themselves and the group they are a part of while striving to achieve positive outcomes (Hayashi & Ewert). The authors asked 46 participants who identified themselves as outdoor leaders to complete several questionnaires meant to measure their levels of emotional intelligence and transformational leadership abilities. Out of these 46 participants, 28 were males, 18 were females, and all were between the ages of 19 and 58 years old. The questionnaires used included the Multifactor Leadership Questionnaire, the Marlowe-Crone Social Desirability Scale, and the Outdoor Leader Experience History inventory. Additionally, the authors chose the BarOn Emotional Quotient Inventory: Short as the tool to measure emotional intelligence due to its widespread use and acceptance among professionals (Hayashi & Ewert). When compared to the emotional intelligence of the general population, the results of the

various questionnaires showed that the outdoor leaders scored much higher in adaptability. In the same vein, outdoor leaders displayed higher levels of transformational leadership when compared to the general public. This increase was found to originate from the outdoor leaders' unique ability to inspire and motivate their students, and from the special attention outdoor leaders paid each student individually (Hayashi & Ewert). Hayashi and Ewert suggest the outdoor leaders' higher levels of emotional intelligence and transformational leadership is related to their history of having had meaningful wilderness experiences. These experiences in turn influenced the outdoor leaders to become better overall leaders throughout the duration of their wilderness careers (Hayashi & Ewert). However, truly to understand the scope of the benefits wilderness adventure guides experience, there needs to be far more research and literature that focuses specifically on wilderness leaders.

Wilderness adventure programs not only increase positive behavior and outcomes in participants and leaders alike; they have been proven to decrease negative attitudes and behavior as well. Kanters, Bristol, and Attarian (2002) studied the stress levels of college students in freshman classes for a Doctor of Veterinary Medicine program. These students showed exalted levels of both physical stress disorders and mental stress disorders. Physical stress disorders included symptoms such as ulcers and irritable bowel syndrome. The mental stress disorders included signs of eating disorders and clinical depression (Kanters et al., 2002). Students from the incoming class of 1997 and 1998 acted as the control groups with no form of intervention. The subjects from the incoming class of 1999 acted as the treatment group. Subjects in the treatment group were enrolled in an Outdoor Experiential Training Group prior to the start of their first semester in

Veterinary School. All three groups completed a series of tests and inventories around the time of finals at the end of the semester. These inventories included the Eysenck Personality Inventory, used to measure personality and self-concept; a modified version of Pennebaker's Index of Limbic Languidness, used to help measure perceived health; and the Intrinsic Leisure Motivation Scale, used to help measure participants' leisure behavior (Kanters et al., 2002). Participants from all three groups led to a sum of 135 subjects studied overall. The results showed that the students who received Outdoor Experiential Training as a part of their pre-semester orientation had lower levels of depression, dejection, tension, and anxiety (Kanters et al. 2002). These findings lend support to the idea that wilderness adventure exposure both increases positive attitudes and behavior in participants, and decreases negative behavior and moods as well.

Varying Outcomes Found in Wilderness Adventure Programs

As with the literature found on the benefits of wilderness therapy, not all research sings the praises of wilderness adventure programming. Research conducted by Fabrizio and Neill (2005) suggests that positive outcomes manifest themselves through wilderness adventure programming only under the right circumstances. The authors draw parallels between the different stages of group development, and the different stages of cultural adaptation. By linking the group development stages known as Forming, Storming, Norming, and Performing (Tuckman & Jensen, as cited in Fabrizio & Neill) to the cultural adaption phases known as the Honeymoon Period, the Crisis Period, the Adjustment Period, and the Adaptation/Resolution/Acculturation Period (Winkleman, as cited in Fabrizio & Neill), the researchers argue that participants on wilderness adventure

trips often go through a type of cultural shock as they trade their world of modern conveniences for world a primitive wilderness (Fabrizio & Neill, 2005). The authors warn that positive outcomes on a wilderness adventure trip may never occur if participants are unable to recover from the Crisis stage of culture shock. This stage, likened to the Storming stage of group development, can be overcome only if trip leaders know how properly to facilitate cultural adaption both on the group and the individual level. Fabrizio and Neill encourage outdoor leaders to become familiar with this facilitation process so that all of the purported benefits of outdoor programming can be seen to fruition (Fabrizio & Neill).

If program leaders cannot help participants move through the different levels of cultural adaptation, participants may even walk away with negative outcomes. Two studies done on female participants in an Australian wilderness adventure/outdoor education program highlighted how a lack of cultural adaptation can be detrimental to participants. In 1994 and 1996, women who had enrolled in programs meant to teach participants how to become outdoor leaders were interviewed about their experiences. Many of them felt that they had spent more time trying to keep up with the physical prowess of their male peers than they had spent developing their skills as outdoor leaders (Lugg, n.d.). Several women pointed out that the physical leadership skills exhibited by many of the men were held in a higher esteem than the inter- and intrapersonal leadership skills of the women. By having to spend the trip 'proving themselves worthy' in comparison to male participants, some of the female participants were unable to completely adapt to their new surroundings. This often led the women to feel frustrated, dejected, and inferior to their male peers. After reviewing these studies, Lugg expressed

a need for a change in the way wilderness adventure/outdoor education is structured. Suggested solutions included becoming aware of masculine gender-favoritism in an outdoor curriculum, focused debriefings during an outdoor excursion to check to see if gender-favoritism has occurred or is occurring, placing as high or a higher value on the importance of soft skills/emotional skills compared to hard skills/physical skills, and engaging in research that further studies how such gender-favoritism can be found in and taken out of wilderness adventure/outdoor education programs.

Occasionally, research that uncovers positive participant outcomes is unable to prove them to be statistically valid. Self-efficacy was the main outcome observed in a study by Jones and Hinton (2007). Their research followed 28 incoming college freshmen as they went through a wilderness orientation program. Each consenting participant completed the Perceived Competence of Functioning Inventory (PCFI) prior to their wilderness adventure trip. This questionnaire was developed to assess participant self-competence, role competence, and relational competence. Participants completed additional PCFIs both at the end of the wilderness orientation, and roughly two months after the program. Jones and Hinton then administered a fourth and final PCFI approximately nine months after the wilderness orientation. Focus groups were also used to foster discussions on the orientation's lasting impacts. Based on comparisons between the PCFI pre-tests and post-tests, there were increases in PCFI scores for both the immediate post-trip tests, and the 8-week post-trip tests. However, only the 8-week post-trip tests showed increases that were statistically significant. The fourth post-test, initiated by Jones and Hinton, was deemed as limited in reliability and validity, as only seven participants completed the fourth stage of testing.

Similar significance problems occurred in a study conducted by Sibthorp (2003) that attempted to measure whether or not prior factors, such as participant expectations and motives, influenced a participant's levels of self-efficacy at the end of their wilderness excursions. Pre- and post-data were collected from 191 subjects who had completed a teen summer adventure program through the commercial adventure provider Broadreach (Sibthorp, 2003). Qualitative data was synthesized from questionnaires meant to measure the presence of different self-efficacy factors. Fifty factors were identified, suggesting that participation in the Broadreach program did raise levels of self-efficacy in the participants. However, these increases in self-efficacy levels were not found to be statistically significant, forcing the author to conclude that there was no direct link between prior participant factors and resulting levels of self-efficacy (Sibthorp, 2003).

Alternative Research Methodology

Most research on recreational, educational, developmental, and therapeutic wilderness programs focuses on uncovering the existence of positive or negative participant outcomes. While this type of research is still important to the wilderness adventure field, other types too have evolved. One such research shift focuses on the study of how outcomes are obtained. This perspective is valuable because it helps to show researchers how to increase positive outcomes and decrease negative outcomes in wilderness adventure programs. Paisley, Furman, Sibthorp, and Gookin (2008) purposefully set out to observe the precise way in which students enrolled in the National Outdoor Leadership School (NOLS) acquired wilderness knowledge that was meant to

lead to an acquisition of positive outcomes. A total of 441 NOLS students who participated in a NOLS course between May and August of 2005 completed qualitative questionnaires revealing that they learned the certain outcomes in specific ways: leadership was best learned through structure-oriented mechanisms, judgment was acquired through instructor-oriented methods, positive small-group behavior was most effectively demonstrated through student-oriented mechanisms, communication skills were absorbed through instructor-oriented methods, and environmental awareness was best taught through a combination of instructor-oriented methods and student-oriented methods (Paisley et al., 2008). By shedding light on the way each of these positive outcomes was best acquired, Paisley et al. offered important insight on how these outcomes can be achieved in future wilderness adventure programs.

Another study done on how outcomes are realized was conducted through the Outward Bound program in Western Canada (McKenzie, 2003). Data was collected on 92 Outward Bound students through a series of questionnaires, interviews, and observations. It was discovered that the use of a solo-expedition as part of the program was the factor that acted as the greatest catalyst for an increase in participant levels of self-awareness. McKenzie quotes one participant as reflecting, "'Sitting in the solo…I wrote letters to my parents and all the people I thought I'd hurt in my life…When you're all alone you are forced to think a little more and think a little harder about things'" (2003, p. 14). Other factors that were found to trigger and increase self-awareness included interaction with other group members, learning to rely on them, working in a group setting, overcoming obstacles while backpacking and mountaineering, having the instructors act as role models, the use of group discussions, being immersed in the

wilderness environment, and participating in a final expedition (McKenzie, 2003). Negative outcomes and the course components that influenced them were also identified. Components such as the run at the end of the course, negative group dynamics, and failing to realize success in face of certain obstacles were also listed as having a negative impact on several subjects' motivation, self-concept, and interpersonal skill development (McKenzie).

In an attempt to understand further how life effectiveness can be increased through outdoor adventure programming, Sibthorp and Arthur-Banning (2004) studied how 'perceived personal empowerment' and 'learning relevance' affected the post-course outcomes of 190 co-ed adolescents enrolled in tri-week adventure programs. A Life Effectiveness Questionnaire (LEQ) was given to each study participant both before their adventure course and after it. In conjunction with the Likert-style LEQ, the Characteristics of the Experience Scale (CES) was given at the end of the courses to measure perceived perceptions of five different domains: group empowerment, instructor support, personal empowerment, group functioning, and learning relevance (Sibthorp & Arthur-Banning). It was found that 'perceived personal empowerment' was significantly related to an increase in overall life effectiveness. Learning relevance, which was also compared to the overall life effectiveness scores, was not found to be statistically significant. However the authors stated that, significant or not, learning relevance did play a role in the increase of participants' LEQ scores, and should not be dismissed as a lesser component in how the positive outcomes of the study were realized (Sibthorp & Arthur-Banning).

Participant development in the National Outdoor Leadership School was visited once again by Sibthorp, Paisley, and Gookin (2007). Between July and October of 2004, NOLS Outcome Instruments (NOI) were given to 596 participants after completion of one of six different NOLS courses. The authors chose the NOI as their measurement tool after the NOI was reviewed and approved by multiple directors and senior staff members at NOLS, as well as faculty members at the University of Utah. In this particular study, the NOI was used to measure how students learned the following skills: communication, judgment in the outdoors, environmental awareness, leadership, outdoors skills, and small group behavior (Sibthorp et al., 2007). It was found that perceived communication gains were experienced at a higher rate by students who had previous expedition experience, and by those who had experienced higher levels of empowerment on trail. Likewise, environmental awareness, gains in outdoor skills, and perceived gains in judgment while in the wilderness were all found to be highest amongst students who experienced high levels of empowerment and had had previous trail experience. In addition to previous experience and perceived empowerment, male participants also realized perceived increases of leadership and gains in small group behaviors (Sibthorp et al.).

Another alternative method of research focuses on how positive psychology can be utilized in wilderness adventure programs. Berman and Davis-Berman identify positive psychology as having the goal of "…fostering excellence through the understanding and enhancement of factors that lead to growth. It embraces the view that growth occurs when positive factors are present, as opposed to the notion that it is the result of dynamic tension" (2005, p. 17). Leaders in the wilderness adventure field who support positive psychology are calling for wilderness adventure programs to build their

curricula around positive reinforcement, rather than the more conventional methods of taking people out of their comfort zones and forcing them to develop through stress and discomfort. In support of the positive psychology movement, a study by Russell (2000) revealed that a compassionate, caring, and non-confrontational approach by wilderness therapy staff members was a common instigator for positive changes in participant behavior and attitude. In fact, while factors such as "solo expeditions" and "time for reflection" were cited by three of the four participants interviewed, only the non-confrontational/compassionate attitudes of the staff members were cited by every participant as essential to their attitude and behavior changes. After gathering qualitative data on four participant case studies from four different wilderness therapy programs, Russell discovered that the positive psychology approach embraced by staff members greatly helped to influence participants to form positive relationships with their family members, and to refrain from the use and abuse of alcohol and drugs. Additionally, the positive psychology approach helped to instill in participants a desire to try harder while in school (Russell).

In contrast to the results collected by Russell (2000), Sheard and Golby (2006) found it difficult to identify various positive psychological outcomes of a wilderness adventure program as statistically significant. Fifty-two Outdoor Adventure Education students filled out multiple questionnaires meant to measure an increase or decrease in positive psychological development. These questionnaires were filled out at the start of the Outdoor Adventure Education programs, and again three months later. Signs of improved psychological development were indicated by increases in participant hardiness, self-esteem, positive affectivity, mental toughness, self-efficacy, and

dispositional rock-climbing (Sheard & Golby, 2006). However, with the exception of "hardiness," none of these increases was found to be statistically significant.

Summary

Although there is a copious amount of research on the outcomes that occur after participating in a wilderness adventure program, there remain discrepancies amongst the studies that currently exist. As shown through this literature review, occasionally results found in one study contradict the results found in another. For every two or three studies that find wilderness adventure programs to be highly advantageous in the form of participant benefits, there is another study that either recognizes negative outcomes, or deems any positive outcomes as not statistically significant. There are studies that focus on what kind of outcomes are achieved through participation in a wilderness adventure program, and there are studies that put a greater emphasis on how these outcomes are achieved. And finally, it must be noted that while there is a plethora of research done on the outcomes present in wilderness adventure participants, there has been little focus on how being part of a wilderness adventure program can benefit a wilderness adventure guide or leader. In the face of this multifariousness of research, Hattie et al. (1997) stress an overall need for more wilderness adventure research in their meta-analysis of over 96 different studies on wilderness adventure programs. After noting the diverse multitude of results found in the different studies in their meta-analysis, the authors conclude that more research in all of the areas of wilderness adventure programming must be done in order to validate the necessity of the existence of outdoor programming (Hattie et al.).

Only the continuation of research in this field can offer conclusive evidence that wilderness adventure programs are a vital part of human development.

CHAPTER THREE

METHODS AND PROCEDURES

Research Site and Subjects

Research was conducted at Camp Menogyn and Camp Hiawatha/Camp Vermilion over the course of the summer of 2009. Camp Menogyn is a YMCA camp located on the edge of the Boundary Waters Canoe Area Wilderness in Northern Minnesota. Menogyn is a tripping camp where campers spend most of their wilderness adventure on trail. Camp Menogyn guides lead campers on either canoeing expeditions, backpacking expeditions, rock climbing expeditions, or combination canoeing/rock climbing expeditions. These wilderness trail adventures range from 8 to 50 days in duration. Campers stay on site only one or two days before they go on trail and one day at the conclusion of their excursion. The research that took place at Menogyn focused specifically on the experiences of the guides employed for the summer. All guides at Camp Menogyn are at least 18 years of age, are certified Wilderness First Responders, and have certifications in either lifeguarding or Wilderness Water Safety (YMCA Camping Services, 2008).

Camp Hiawatha and Camp Vermilion are both in Northern Minnesota, and are owned and operated by Voyageurs Lutheran Ministries (VLM). The camp counselors and canoe guides employed by VLM work alternately at both camps throughout the summer camping season. Camp Hiawatha and Camp Vermilion both offer week-long in-camp programs for child and teen campers alike. The in-camp counselors working with the in-camp programs lead one overnight camping experience off site per week.

Counselors spend the duration of the week facilitating bible studies, arts and crafts, swimming, canoeing, low ropes course activities, and daily campfires and worship services. The tripping division of VLM is housed exclusively at Camp Vermilion. The canoe guides at Camp Vermilion lead young adults and teens on canoe adventures in the Boundary Waters Canoe Area Wilderness that last for a duration of five days. For the purpose of this study, research was meant to be conducted on both VLM canoe guides and in-camp counselors. All camp counselors at Camp Hiawatha/Camp Vermilion are at least 18 years of age, and are certified in CPR and First Aid. Canoe guides at Camp Vermilion are 21 years of age or older, and hold certifications in Wilderness First Aid and Lifeguarding (Voyageurs Lutheran Ministry, n.d.).

Variables and Instruments

The variable measured in this study was the experience of working for a wilderness adventure program and how it affected trail guides and in-camp counselors. The instruments that were used to measure this effect were the Life Effectiveness Questionnaire (see Appendix B), and a short answer survey that asked research participants to reflect on their experiences as wilderness adventure leaders. The Life Effectiveness Questionnaire (LEQ) was developed by Neill and Richards (2007). Neill defines life effectiveness as “a person’s capacity to adapt, survive, and thrive” (Neill, 2007, p.1.). The LEQ examines life effectiveness by measuring the following areas: Time Management, Social Competence, Achieve Motivation, Intellectual Flexibility, Task Leadership, Emotional Control, Active Initiative, and Self Confidence (see Appendix C and Appendix D). These areas are measured through the use of an eight

point Likert scale. Research participants rated statements such as “I like to be busy and actively involved in things” by choosing a numerical ranking that ranged from “1: False, Not Like Me” to “8: True, Very Much Like Me” (Neill).

In order to observe changes in life effectiveness from a qualitative lens, the researcher developed a short answer survey. This questionnaire included open-ended questions meant to prompt research participants to examine and reflect upon their experiences as wilderness adventure leaders. A few demographic questions were included on the short answer survey as well (see Appendix E).

Collection Techniques

Prior to questionnaire distribution, permission to go forward with the study was granted by the Southern Illinois University Human Subjects Committee (see Appendix A), Voyageurs Lutheran Ministry (see Appendix F), and YMCA Camp Menogyn (see Appendix G). Quantitative data was collected through the Life Effectiveness Questionnaire, which was given to the trail guides and in-camp counselors at the start of the summer during staff training. Both camp in-counselors and trail-guides were informed that participation in the research was on a volunteer basis, and that only the researcher would see the results. Research participants were asked to provide their dates of birth (mm/dd/yyyy) on all forms rather than their names to help ensure participant anonymity. This identification number was also used to match the pre-summer surveys with respective post-summer surveys. A post-test LEQ was given research participants at the duration of the summer. Additionally, qualitative data was assessed via a short answer survey that asked open-ended questions about participant experience as a

wilderness adventure leader. This questionnaire was given to research participants at the end of the summer along with the post-summer LEQ.

Data Analysis Techniques

After the research data was collected, the data was run through a series of independent and dependent t-tests. The t-tests were used to compare the pre-summer and post-summer LEQ scores to one another. Additionally, the t-tests were used to compare the post-summer LEQ scores amongst different demographics from the population sample. The qualitative data yielded by the short answer surveys were assessed using the techniques of enumeration and constant comparison. According to Malkin and Howe (1993), enumeration is the method where different words and phrases are counted by the researcher. The frequency of the repetition of a certain word or phrase can suggest a high level of importance or significance for said word or phrase. Constant comparison is a method used to break down the data into small units of information. These units of information are then indexed and categorized in an effort to draw understanding from their meanings. The researcher used both of these techniques to analyze the qualitative data produced from the short answer surveys.

CHAPTER FOUR

RESULTS

Summary of Procedures

This chapter presents the results of both the quantitative and qualitative surveys given to research participants during the course of their summer employment as wilderness adventure leaders between May and August of 2009. Participants were wilderness adventure leaders whom were employed by either YMCA Camp Menogyn or Voyageurs Lutheran Ministry. Surveys were given to wilderness adventure leaders at the beginning and the end of their summer employment. All surveys were given in paper format; no surveys were administered electronically.

At the beginning of the summer, research participants were given a LEQ (LEQ). This questionnaire was used to collect the quantitative data analyzed in this study. The LEQ consisted of 24 different Likert statements. Participants read each statement and self-rated how well they felt the statement described themselves by rating it on a scale that ranged from 1 (FALSE, not like me) to 8 (TRUE, like me). The different questions on the LEQ were related to eight different factors associated with life effectiveness: Time Management, Social Competence, Achievement Motivation, Intellectual Flexibility, Task Leadership, Emotional Control, Active Initiative, and Self Confidence. At the end of each participant's term of summer employment, the same LEQ was given. All self-reported scores from both of the installments of the LEQ were run through a series of independent t-tests and dependent t-tests to determine statistical significance for a variety

of comparisons. The program used to analyze the quantitative data collected from the LEQs was SPSS Statistics 17.0 software.

A short-answer survey was given to research participants at the end of their term of summer employment. This survey allowed participants to respond to questions asked about their experiences as a wilderness adventure leader in their own words. The participants were asked to discuss their positive or negatives experiences during their time as wilderness adventure employees, their notice of any changes in themselves over the course of the summer, and their willingness to recommend wilderness adventure employment to others. The responses collected from the Short Answer Surveys were used to collect the qualitative data used in this research. Constant comparison and enumeration were used to sort answers from the surveys into different themes and categories that emerged from the data. The various categories and themes that were extracted from the qualitative data were used to supplement the findings from the quantitative data analysis.

Survey Sample

Over the course of the research period, 59 research participants originally participated in this study. Of these participants, 30 (51%) were employed by Voyageurs Lutheran Ministry (see Table 1 for a summary of the research participants drawn from Voyageurs Lutheran Ministry), and 29 (49%) were employed by Camp Menogyn. The surveys completed by employees of Camp Menogyn were unusable for data analysis. Although 29 of the 29 research participants (100%) completed the pre-summer surveys, zero out of the 29 (0%) participants from Camp Menogyn filled out the post-summer

employment surveys. As such, there is no data on how many of the Camp Menogyn participants were first-year employees or returning employees, and there is also no data that states how many Camp Menogyn employees identified as guides and how many employees identified as in-camp staff.

Of the 30 participants from Voyageurs Lutheran Ministry, 22 (73%) were female and eight (27%) were male. A reported 11 (37%) identified themselves as first-year employees, and 10 (33%) reported that they were returning employees. There were nine (30%) participants who did not report whether or not they were first-year or returning employees. Out of the 30 participants employed by Voyageurs Lutheran Ministry, nine (30%) completed only the pre-summer surveys, nine (30%) completed only the post-summer surveys, and 12 (40%) completed both the pre and post-summer surveys.

Table 1
Voyageurs Lutheran Ministry Demographics

	Total	Percent
Female	22	73
Male	8	27
Total	30	100
Duration: First-Year	11	37
Duration: Returning Staff	10	33
Duration: Not Reported	9	30
Total	30	100
Pre-Summer Surveys	9	30
Post-Summer Surveys	9	30
Pre-Summer and Post-Summer Surveys	12	40
Total	30	100

Research Question 1: Quantitative Analysis

The first research question proposed at the beginning of this study sought to examine if the over all self-reported life effectiveness of those who identified themselves as trail guides increased over the course of one term of summer employment. There was no usable data to further explore this question, as none of the research participants from Voyageurs Lutheran Ministry identified as trail guides. Although most of the research participants from Camp Menogyn were hired specifically to be trail guides, none of the research participants filled out the post-summer surveys. Thus, a comparison between the pre-summer and post-summer LEQs filled out by those who identified as trail guides could not be made.

Research Question 2: Quantitative Analysis

The second research question sought to determine if the self-reported overall life effectiveness of those who classified themselves as in-camp counselors increased over the course of one term of summer employment. To analyze this quantitatively, the scores from the participants who had completed the LEQs from both the pre-summer installment of surveys and the post-summer installment of surveys were run through a dependent t-test (see Table 2). The null hypothesis was that employment as an in-camp counselor has no effect on self-reported life effectiveness. The results of the changes the in-camp counselors' pre-summer and post-summer LEQ scores were $t_{(11)} = 1.786$, $p = .102$. This resulted in a statistical decision to fail-to-reject the null hypothesis. However, there was also a .58 standard deviation difference between the pre-summer and post-summer LEQ scores. This signifies that there was a .58 effect size, or, moderate change in the scores of

the life effectiveness of the analyzed research participants after one summer of employment as an in-camp counselor.

Table 2
Pre-Summer and Post-Summer LEQ Comparisons

	Pre-Summer	Post-Summer
Mean	18.8932	19.9427
Variance	1.7809	1.84781
Observations	12	12
df	11	11
p-value two-tail	0.102	
t-critical value two-tail	1.786	
Effect Size	0.58	

Research Question 3: Quantitative Analysis

The purpose of the third research question was to discover if there was a difference between the overall life effectiveness of trail guides and in-camp counselors. As there was no usable data turned in by those whom identified themselves as trail guides, no comparisons could be made.

Additional Quantitative Analysis

Once it became clear that there were not enough data to explore all of the original research questions in depth, the researcher re-examined the data to see if other comparisons could be made. It was found that an analysis of the post-summer life effectiveness scores between female and male participants, and an analysis of the post-summer life effectiveness scores between first-year employees and returning employees, could be made by running the LEQ data through independent t-tests.

The null hypothesis for the comparison between the post-summer LEQ scores of females and males was that gender has no effect of the life effectiveness of wilderness adventure leaders. After running the post-summer LEQ scores through an independent t-test (see Table 3), it was found that there was a change of $t_{(18)} = 1.256$, $p = .225$ between males and females, which lead to a statistical decision to fail-to-reject the null hypothesis.

Table 3
Female and Male Post-Summer LEQ Comparisons

	Female	Male
Mean	19.7054	20.6354
Variance	1.66165	1.05654
Observations	14	6
df	18	18
p-value two-tail	0.225	
t-critical value two-tail	1.256	

Another independent t-test was run to compare the post-summer LEQ scores of first-year employees to the post-summer LEQ scores of returning employees (see Table 4). The null hypothesis for this comparison was that there is no difference between the life effectiveness of first-time wilderness adventure leaders and those who have been employed as wilderness adventure leaders in the past. An analysis of the post-summer scores showed that there was a change of $t_{(18)} = .713$, $p = .485$ between new and returning wilderness adventure leaders. Based on this data, a statistical decision was made to fail-to-reject the null hypothesis.

Table 4

First-Year and Returning Staff Post-Summer LEQ Comparisons

	First-Year	Returning
Mean	19.6797	20.1875
Variance	1.39891	1.65617
Observations	8	12
df	18	18
p-value two-tail	0.485	
t-critical value two-tail	0.713	

Qualitative Analysis

After the quantitative data was collected and analyzed, the researcher began to analyze the qualitative data collected from the Short Answer Surveys given as a part of the post-summer evaluations. By using the qualitative analysis methods of constant comparison and enumeration, several themes from the self-reported Short Answer Surveys emerged (see Table 5). These themes were: Increased Self-Confidence, Spiritual Connections, Personal Changes/Growth, Awareness of Strengths/Weaknesses, and Positive Community. Additionally, 100% of the participants who completed the short answer survey stated that they would recommend a job as a wilderness adventure leader to someone else.

Table 5

Themes/Categories Gleaned from the Post-Summer Short Answer Surveys

Themes/Categories	Description
Increased Self-Confidence	Research participants expressed greater feelings of self-confidence. Perceptions of their ability succeed increased over the summer.
Spiritual Connections	Research participants referred to a spiritual connection of some sort. This could be a reference to inner peace, or a specific religious or spiritual affiliation.
Personal Changes/Growth	Research Participants noted that they were aware of personal growth. Participants described a further development of their leadership skills, human skills, teaching skills, and/or communication skills.
Awareness of Strengths/Weaknesses	Research Participants reflected on their own personal strengths and/or weaknesses, and how those strengths/weaknesses affected their leadership style.
Positive Community	Research Participants expressed a feeling of belonging to a community that embraced and supported its members.
100% Job Recommendation	Research Participants testified to the merits of being a wilderness adventure leader and recommended that others experience such a position. In this study, there was a 100% rate of recommendation.

Evidence of Increased Self-Confidence emerged from statements in the Short Answer Surveys. One male first-year employee wrote, “My confidence in leading…has increased exponentially.” A returning staff female participant also expressed an increase in self-confidence by reporting, “My leadership has grown incredibly – I was encouraged

to own my authority and truly lead this summer. I have watched my confidence and competence grow." Another female first-year employee added, "On my application I wrote that I wanted to gain confidence in myself and the things I do. I believe I have gained tons more than I started with."

Spiritual Connections transpired as another common thread amongst the responses. These connections included feelings of peace, strengthening of religious/spiritual faiths, and spiritual renewal. "I have grown spiritually and more confident in myself," reported one first-year male participant. A male returning staff participant wrote, "My faith has been strengthened and reaffirmed." One female first-year participant reflected, "I don't think I would be ready, physically, emotionally, or spiritually, for my next year of school if I wasn't here this summer." Finally, a female returning staff participant revealed, "I feel like I've discovered a deeper sense of peace."

Personal Changes/Growth was another theme that became apparent while sorting and categorizing the short-answer survey responses. Some participants were clearly aware that personal growth had taken place over the course of their summer employment as a wilderness adventure leader. One male returning staff participant wrote "Personal growth was more evident this summer than at any other time in my life. Life altering summer!" Other participants more subtly noticed changes in their demeanors and outlook on life: "I think I am more patient with myself and others and better at living in the moment and not worrying about the future," mused a first-year female staff member. A first-year male employee reflected:

> I feel that I'm more apt to have a positive outlook on working; I've learned to enjoy the moment rather than trade my time for money. I feel

more apt to meet and greet people of all ages and to feel comfortable talking to any type of person.

Still other research participants noticed opportunities for personal growth not only in themselves, but for other wilderness adventures leaders as well. A first-year female participant explained, "I feel that as a young adult camp allows you to grow as a person, but not while having to act grown up. You are allowed to be and find yourself…You are taught to live exhilarating lives!"

Participant responses also revealed that many developed a sense of Awareness of Strengths/Weaknesses. "I am calmer in tough situations and do not stress as much," a female returning staff member commented. Another female returning staff member wrote about a time when she became acutely aware of how a personal weakness affected her ability to lead: "The only negative experience I encountered this summer was due to a lack of self-care. I got tired when I wasn't taking care of my physical, emotional and spiritual needs." A different female returning staff member discussed how becoming aware of a personal weakness allowed her to strengthen her communication abilities: "Especially in the beginning of the summer, I took every critique of program, leadership, camp, etc. very personally – I didn't know how to deal with it in a healthy way." She went on to say that she learned that it was important to, "Communicate, communicate, communicate. Also, it's really important to learn how to take constructive criticism in a healthy way (not taking it personally)." Other participants also reflected on how facing their weaknesses played a large role in their personal growth. A first-year female participant reflected on the power of facing her weaknesses in order to become a stronger leader, writing, "I am stronger! I learned this summer that in order to make myself

stronger I had to be vulnerable and expose my fears and anxieties." She continued, "This summer I pushed myself farther than before in my leadership skills…it has been tough at times, but at that time is when I have experienced the most growth."

Another theme that surfaced consistently was the awareness and appreciation of a strong Positive Community built by the wilderness adventure leaders. "My leadership team worked incredibly well together – I have never laughed so hard, had so much fun, yet felt so proud of [what]… we were doing at camp," wrote a returning female staff member. A first-year female staff member added, "It has been an amazing experience… seeing how a community of such random personalities can become so close and grow so much in… 9 short weeks." Another first-year female staff expressed an intense feeling and awareness of a Positive Community when she wrote, "I am more steady. I feel loved. I feel like there is a place I belong."

Out of all of the research participants who filled out a post-summer short answer survey, every single participant (100%) declared that they would recommend a job as a wilderness adventure leader to others. "The chance to serve in this capacity is incredible," proclaimed a first-year female staff member. "I hope that others are able to have the same opportunity to work with youth and learn, teach, and experience [this] leadership position," added a female returning staff member. Another returning female staff member expressed, "This is the best job I could ever ask for and is an amazing experience you can't find anywhere else." And finally, while reflecting on her experience as a wilderness adventure leader, one returning female staff member declared, "It is a life changing experience!"

CHAPTER FIVE

DISCUSSION AND IMPLICATIONS OF FINDINGS

Summary of Purpose

The purpose of this research was to study the positive outcomes experienced by those who work as wilderness adventure leaders. Specific attention was paid to the self-reported increase of life effectiveness amongst the research participants. An additional purpose of this study was to fill a need for research in this area. Currently there is an abundance of research on the positive outcomes experienced by those who participate in wilderness adventure activities and excursions. Conversely, there is currently very little research on the positive outcomes experienced by those who lead others in wilderness adventure activities and excursions.

Summary of Procedures

Quantitative and qualitative data was collected over the course of the summer of 2009. Research participants were employees of Voyageurs Lutheran Ministry, a non-profit organization that owns and operates Camp Vermilion and Camp Hiawatha. To collect quantitative data, Life Effectiveness Questionnaires (LEQs) were distributed to research participants at the beginning of the summer during staff training, and then again at the end of the summer during staff closing weekend. The LEQs given at the beginning of the summer and at the end of the summer were identical in nature. Each LEQ was comprised of 24 different Likert statements that measured eight different factors related to life effectiveness: Time Management, Social Competence, Achievement Motivation,

Intellectual Flexibility, Task Leadership, Emotional Control, Active Initiative, and Self Confidence. The scores of the pre-summer surveys were compared to the scores of the post-summer surveys to see if after one summer of working as a wilderness adventure leader, participants' scores in these eight different factors increased.

Short Answer Surveys were also given at the end of the summer alongside the post-summer LEQ in order to obtain qualitative data. These surveys allowed research participants to describe in their own words how their wilderness adventure leadership had impacted them. Participants were asked to reflect on any positive or negative experiences they had had over the summer. The wilderness adventure leaders were also asked to discuss any changes they themselves had noticed after their summer term of employment. Lastly, the research participants were asked if they would recommend wilderness adventure employment to others, and why.

Summary of Data Analysis

Analysis of the quantitative data was possible after the LEQ scores were tabulated and run through a series of dependent and independent t-tests. Comparisons were made between pre-summer and post-summer LEQ scores, female and male post-summer LEQ scores, and the post-summer LEQ scores of first-year wilderness adventure leaders and returning wilderness adventure leaders. Enumeration and constant comment were used to sort and index the qualitative data extracted from the Short Answer Surveys. Through this process, various repeating themes, categories, and ideas reported by the participants were identified and analyzed.

Summary of Findings

The usable data came from the research participants who were employed by Voyageurs Lutheran Ministry (n=30). Out of these 30 participants, 22 (73%) were female and eight (27%) were male. The data also revealed that 11 of the 30 research participants were first-year wilderness adventure employees (37%), 10 (33%) participants were returning wilderness adventure employees, and nine (30%) participants did not report if they were new or returning wilderness adventure employees.

It was found that there was a change of $t_{(11)} = .102$, $p = .102$ between the pre-summer and the post-summer LEQ scores. Statistically, this led the researcher to fail-to-reject the null hypothesis, which stated that wilderness adventure employment does not have an effect on life effectiveness. The pre-summer and post-summer data also revealed a .58 standard deviation change between data sets, which signified a moderate effect size, or, a moderate change between the pre-summer and the post-summer life effectiveness scores. When comparing the post-summer LEQ scores between females and males, a change of $t_{(18)} = 1.256$, $p = .225$ was discovered. This resulted in a failure-to-reject the null hypothesis, which stated that gender would have no effect on self-reported life effectiveness after a summer of wilderness adventure employment. A comparison of post-summer LEQ scores between first-year wilderness adventure leaders and returning leaders revealed a $t_{(18)} = .713$, $p = .485$ difference. This led the researcher to fail-to-reject the null hypothesis which stated there would be no difference in the overall life effectiveness of a first-year wilderness adventure leader and a returning leader.

A qualitative data analysis of the post-summer short answer surveys brought to light six different categories and themes frequently mentioned by participants: Increased

Self-Confidence, Spiritual Connections, Personal Changes/Growth, Awareness of Strengths/Weaknesses, Positive Community, and a 100% Job Recommendation to Others. Various quotations extracted from the short answer surveys support the indexing of the responses into these six categories. Increased Self-Confidence was highlighted by the majority of the participants, specifically by one male first-year employee who stated, "My confidence in leading… has grown exponentially." Spiritual Connections were highlighted by a female returning staff member who expressed, "I feel like I've discovered a deeper sense of peace." An example of Personal Changes/Growth was detected when a male returning staff member declared "Personal growth was more evident this summer than at any other time in my life. Life altering summer!" Several research participants reported that they had gained an Awareness of Strengths/Weaknesses after a summer of wilderness adventure employment. A female returning staff member recognized a weakness when she confessed, "The only negative experience I encountered this summer was due to a lack of self-care. I got tired when I wasn't taking care of my physical, emotional, and spiritual needs." Showing her awareness of a personal strength, a first-year female research participant wrote, "I am stronger! I learned this summer that in order to make myself stronger I had to be vulnerable and expose my fears and anxieties." Another first-year female employee expressed her sense of the existence of a Positive Community when she expressed, "I am more steady. I feel loved. I feel like there is a place I belong." And finally, every single participant who filled out a post-summer short answer survey stated that they would recommend employment as a wilderness adventure leader to others. Examples of this recommendation come from a first-year female staff member who wrote, "The chance to

serve in this capacity is incredible," and a returning female staff member who declared, "It is a life changing experience!"

Conclusions

A thorough analysis of both the qualitative and quantitative data from this study has shown that working as a wilderness adventure leader does affect overall life effectiveness. Although the quantitative data did not show a "statistically significant" change in participants' self-reported life effectiveness, it would be misleading to assume a lack of statistical significance can be equated with a lack of real-world significance. To say that there was no statistically significant change in the participants' life effectiveness is not to say there was no change at all. As shown by the .58 change in effect size between the life effectiveness scores on the pre-summer surveys and the post-summer surveys, there was a moderate change in the wilderness adventures leaders' overall scores. Additionally, this moderate change between the scores of the pre-summer and post-summer LEQs was a positive one, which means that the participants' life effectiveness scores increased after their summer term of employment as a wilderness adventure leader. The positive, moderate effect size score of .58 also suggests that, had this study surveyed a much larger population sample, statistical significance would probably have been found.

Although there was a moderate increase in the effect size between the pre-summer and post-summer questionnaire scores overall, it was not determined that there was a statistically significant change between the post-summer questionnaire scores of females and males. This suggests that both females and males alike experience an increase in life

effectiveness after being employed as wilderness adventure leaders. Similarly, a statistically significant difference between the post-summer scores between first-year staff members and returning staff members was not identified, which suggests that an increase in life effectiveness can be found in both new and experienced wilderness adventure leaders. As with the pre-summer and post-summer score comparisons, statistical significance may be found amongst these categories under a study with a larger population sample.

The most striking real world significance was found in abundance throughout the qualitative data drawn from the post-summer short answer surveys. In their own words, the research participants gave testimony to the ways in which being a wilderness adventure positively impacted, and sometimes even changed, their lives. Whether it was learning to confront personal weaknesses, experiencing new levels of personal growth, or feeling at home in a loving and supportive community, the participants found their summer experiences to be steeped in benefits that challenged them, strengthened them, and transformed them. This is not to undermine the place that statistical significance has in research. Ideally, the quantitative data in this study would have supported the real-world significance found by the qualitative data. However, it is important to note that, as statistically sound as it would have looked to reach a p-value less than or equal to .05, a hand written paragraph that describes a wilderness adventure leadership experience as "life changing" is not something that should be undervalued or ignored. After all, Neill once defined life effectiveness as "the extent to which a person believes that they are effective in various major tasks of life" (as cited in Sibthorp & Arthur-Banning, 2004, p. 2). By this definition, a person only has to believe they are effective in various important

areas of life to achieve actual life effectiveness. And so, life effectiveness can be achieved even if an instrument used to study life effectiveness does not find statistically significant quantitative results.

Discussion and Implications

An increase in life effectiveness was reported by every research participant surveyed, regardless of gender or prior experience. However, in order to better understand what an increase in life effectiveness means, it is necessary to break down the eight different factors related to life effectiveness that were measured by the LEQ. In addition to the other definitions of life effectiveness discussed in this study, life effectiveness can also be defined as "Personal skills that are important factors in how effective a person will be in achieving his/her desires/wishes in life" (Neill, 2007, p.1). The LEQ was formulated to measure eight of these personal skills, or factors, in relation to life effectiveness: Time Management, Social Competence, Achievement Motivation, Intellectual Flexibility, Task Leadership, Emotional Control, Active Initiative, and Self-Confidence.

Neill defines Time Management as "The extent that an individual perceives that he/she makes optimum use of time" (2007, p.1). Under this definition, research participants who self-reported high scores in this area believe that they are able to accomplish tasks in a timely manner with little to no procrastination. Social Competence is defined as "The degree of personal confidence and self-perceived ability in social interactions" (Neill, 2007, p.1). Participants who rated themselves highly in this category feel confident and at ease in social settings, and do not feel a need to avoid social

interactions. Achievement Motivation is defined by Neill as "The extent to which the individual is motivated to achieve excellence and put the required effort into action to attain it" (2007, p.1). Participants who scored high under this factor are presumably people who are not afraid to work hard to achieve their goals. A research participant who felt he or she is open to new ideas was likely to rate themselves high in the Intellectual Flexibility category, which Neill defines as "The extent to which the individual perceives he/she can adapt his/her thinking and accommodate new information from changing conditions and different perspectives" (2007, p.1). Task leadership is defined as "The extent to which the individual perceives he/she can lead other people effectively when a task needs to be done and productivity is the primary requirement" (Neill, 2007, p.1). High scorers under this factor are probably not afraid to take control in group settings, and are more likely to step up into positions of leadership when given the chance. Those who scored high under the factor of Emotional Control, which is defined as "The extent to which the individual perceives he/she maintains emotional control when he/she is faced with potentially stressful situations" (Neill, 2007, p.1), believe that they are able to remain calm even when under pressure. Active Initiative is defined by Neill as "The extent to which the individual likes to initiate action in new situations" (2007, p.1). A participant who scored high under Active Initiative enjoys the process of "doing" more than the process of "planning," and is often seen as a "go-getter" who brings energy to the group. Finally, Neill defines Self-Confidence as "The degree of confidence the individual has in her/her abilities and the success of their actions" (2007, p.1). Those with high Self-Confidence are champions of the "I know I can do it!" attitude, and are more likely to take risks in social and leadership settings.

Each one of these factors is seen as specific skill set that is necessary to achieve life effectiveness. Thusly, as each research participant saw an improvement in one or more of these different factors, so too did he or she experience an overall increase in life effectiveness. The personal testimonies drawn from the qualitative data support this notion. Although a research participant may not have directly said that they felt an increase in their Task Leadership abilities, the female returning staff member who wrote "I've become more confident in my ability to lead" was certainly referring to Task Leadership, even if she did not know that was the specific title developed for that factor. Similarly, the returning female staff member who reflected "I am calmer in tough situations and do not stress as much" may not have realized she was expressing an increase in Emotional Control, but whether or not she was familiar with the factor title was arbitrary. All that truly mattered was that she experienced an increase in Emotional Control, and was aware of it on an intrinsic level.

The purpose of this study was officially to document what wilderness adventure leaders have already known for years to be true: the positive benefits of being a wilderness adventure leader are considerable. Ask any wilderness adventure leader if their work has changed their life and/or the lives of others for the better, and they will express with absolute certainty that it has. This study has merely captured a few of the testimonies wilderness adventure leaders have given about the merit of their craft and presented it in a research format.

The research conducted for this study has shown that working as a wilderness adventure leader can increase life effectiveness. It did not matter if the wilderness adventure leader was female or male. It made no difference if it was the first time the

participants had worked in the field or if they were seasoned veterans. The idea that increased life effectiveness was experienced by all reveals the accessibility of the positive human transformation that can occur in the wilderness adventure field. A field that can positively impact a human being's life so is worthy of both inquisition and preservation through purposeful research. To this degree, the wilderness adventure field, and the benefits experienced by those in positions of leadership, is an area deserving of further study, observation, and exploration.

Recommendations

The user-friendliness of the instruments used in this study makes this research effort one that could easily be recreated. The significance of the findings of this study suggests that this research effort absolutely should be recreated. Several recommendations can be made to improve upon the methodology of this study for future use:

1. Increase the size of the sample population: A larger population size will increase the likelihood of reaching statistical significance. Additionally, a larger population size is likely to increase the calculated Effect Sizes. Greater statistical significance can act as a support for the real world significance gleaned from qualitative data.
2. Randomize the sample population further: The population sample used in this study was chosen based largely on convenience for the researcher. Canoe guides, in-camp counselors, backpacking guides, and rock climbing guides were available to be surveyed at the sites chosen for this research venture.

Other wilderness adventure leaders, such as rafting guides, caving expedition leaders, dog mushers and nature specialists are just a few who could and should be considered in future research endeavors.

3. Have a representative physically present when collecting surveys: To alleviate the problem of surveys being filled out only partially, or not filled out at all, it is recommended that a researcher or representative be on hand to administer all surveys and to encourage research participation. In the case of this study, the researcher was present when all of the pre-summer surveys were handed out to Camp Menogyn employees. After answering participant questions and encouraging involvement, the researcher was able to collect surveys from 100% of the employees at Camp Menogyn. However, there was no representative present at Camp Menogyn to collect the post-summer surveys. A staggering 0% of the staff members filled out their post-summer questionnaires, thus rendering the pre-summer surveys useless. While many different factors could have contributed to this drastic participation shift, the researcher feels very strongly that most post-summer surveys would have been turned in as well if there had been someone physically present to encourage participation. After all, it is much easier to ignore a survey placed in your mailbox than it is to ignore a real live person who only wants to graduate.
4. Continually improve upon the methods used in this study: The researcher's final recommendation is to continue to partake of research enterprises such as this one, and to improve upon the methodology every time a research attempt

is made. Improving upon this study will not only further validate its results; it will also pave the way for new studies in the wilderness adventure field that as of yet have not been investigated. By adding academic validity to the wilderness adventure field, there is a greater chance that the field will be preserved, allowing future generations to experience all of the benefits wilderness adventure leadership can offer.

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APPENDICES

APPENDIX A

SUBJECT CONSENT FORM

Dear Research Participant:

I am a graduate student seeking my Master's degree in the Department of Health Education and Recreation at Southern Illinois University Carbondale.

I am asking you to participate in my research study. The purpose of the study is to determine if working at a summer camp results in an increase of overall life effectiveness. You were selected to participate because you are currently employed at a summer camp.

There is currently a lack of research in this area. Although you will receive no personal benefits from your participation, your participation will greatly benefit the outdoor recreation field by adding to the research that does exist. Your participation in this research is voluntary, and should you chose to participate you have the right to withdraw your participation at any time.

The purpose of the enclosed survey is to gather information about how you think and feel about yourself at the beginning of your summer employment. At the end of the summer, an identical survey will be given to you, as well as a short-answer survey. The purpose of the second survey and the short-answer survey is to measure how you think and feel about yourself at the end of your summer employment.

The survey at the beginning of the summer will take 15 to 20 minutes to complete. The survey at the end of the summer will take 20 to 25 minutes to complete. All of your responses will be kept confidential within reasonable limits. Only people directly involved with this project will have access to the surveys. Any results will be presented in a way that cannot be traced directly back to you. Please do not write your name on any of the surveys. Your birthday (mm/dd/yyyy) will be used as an identification number rather than your name in order to keep surveys anonymous. This identification number will be used only to match your survey from the beginning of the summer to your survey from the end of the summer.

Questions about this study can be directed to me or to my supervising professor, Dr. Whitney Ward, Department of Health Education and Recreation, SIUC, Carbondale, IL 62901-4632. Phone: (618) 453-2777.

Thank you for taking the time to assist me in this research.

Cory Maria Dack
(218) 355-8665
corydack@yahoo.com

This project has been reviewed and approved by the SIUC Human Subjects Committee. Questions concerning your rights as a participant in this research may be addressed to the Committee Chairperson, Office of Research Development and Administration, SIUC, Carbondale, IL 62901-4709. Phone (618) 453-4533. E-mail: siuhsc@siu.edu

My signature below gives consent to use my data for research purposes.

_____ _____

Signature Date

APPENDIX B

LIFE EFFECTIVENESS QUESTIONNAIRE WITH INSTRUCTIONS

SID

L.E.Q. - H©

PLEASE DO NOT TURN OVER YET

READ THESE INSTRUCTIONS

This is a chance for you to consider how you think and feel about yourself in some ways. **This is not a test** - there are no right or wrong answers, and everyone will have different responses. It is important that you give your own views and that you be honest in your answers and do not talk to others while you think about your answers. They will be used only for research purposes and will in no way be used to refer to you as an individual at any time.

Over the page are a number of statements that are more or less true (that is like you) or more or less false (that is unlike you). Please use the eight point scale to indicate how true (like you) or how false (unlike you), each statement is as a description of you. **Answer the statements as you feel now**, even if you have felt differently at some other time in your life. Please do not leave any statements blank.

FALSE NOT LIKE ME							TRUE LIKE ME
1	2	3	4	5	6	7	8
This statement doesn't describe me at all; it isn't like me at all		More false than true		More true than false		This statement describes me very well; it is very much like me	

SOME EXAMPLES

A. I am a fast thinker. 1 2 3 4 5 (6) 7 8

(The 6 has been circled because the person answering believes the statement "I am a fast thinker" is sometimes true. That is, the statement is sometimes like him/her.)

B. I am a good storyteller. 1 (2) 3 4 5 6 7 8

(The 2 has been circled because the person answering believes that the statement is mostly false as far as he/she is concerned. That is, he/she feels he/she does not tell good stories.)

C. I enjoy working on puzzles. 1 2 3 4 5 6 7 (8)

(The 8 has been circled because the person really enjoys working on puzzles a great deal, therefore the statement is definitely true about him/her.)

**** ARE YOU SURE WHAT TO DO? ****

If yes, then please turn the page over. Please do NOT write your name on any of the surveys. Please provide your full birthday (mm/dd/yyyy). Your birthday will only be used to match your survey from the beginning of the summer to your surveys from the end of the summer. Circle your answers for all the statements.

If still unsure about what to do, ASK FOR HELP.
PLEASE GIVE HONEST, PRIVATE ANSWERS

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L.E.Q. - H©

BIRTHDAY (mm/dd/yyyy):_____ MALE / FEMALE (circle one)

SUMMER 2009 EMPLOYMENT (circle one): Camp Menogyn Voyageurs Lutheran Ministry

STATEMENT	FALSE not like me							TRUE like me
01. I plan and use my time efficiently.	1	2	3	4	5	6	7	8
02. I am successful in social situations.	1	2	3	4	5	6	7	8
03. When working on a project, I do my best to get the details right.	1	2	3	4	5	6	7	8
04. I change my thinking or opinions easily if there is a better idea.	1	2	3	4	5	6	7	8
05. I can get people to work for me.	1	2	3	4	5	6	7	8
06. I can stay calm in stressful situations.	1	2	3	4	5	6	7	8
07. I like to be busy and actively involved in things.	1	2	3	4	5	6	7	8
08. I know I have the ability to do anything I want to do.	1	2	3	4	5	6	7	8
09. I do not waste time.	1	2	3	4	5	6	7	8
10. I am competent in social situations.	1	2	3	4	5	6	7	8
11. I try to get the best results when I do things.	1	2	3	4	5	6	7	8
12. I am open to new ideas.	1	2	3	4	5	6	7	8
13. I am a good leader when a task needs to be done.	1	2	3	4	5	6	7	8
14. I stay calm and overcome anxiety in new or changing situations.	1	2	3	4	5	6	7	8
15. I like to be active and energetic.	1	2	3	4	5	6	7	8
16. When I apply myself to something I am confident I will succeed.	1	2	3	4	5	6	7	8
17. I manage the way I use my time well.	1	2	3	4	5	6	7	8
18. I communicate well with people.	1	2	3	4	5	6	7	8
19. I try to do the best that I possibly can.	1	2	3	4	5	6	7	8
20. I am adaptable and flexible in my thinking and ideas.	1	2	3	4	5	6	7	8
21. As a leader I motivate other people well when tasks need to be done.	1	2	3	4	5	6	7	8
22. I stay calm when things go wrong.	1	2	3	4	5	6	7	8
23. I like to be an active, 'get into it' person.	1	2	3	4	5	6	7	8
24. I believe I can do it.	1	2	3	4	5	6	7	8

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ITN/GER 11/95 LEQH.DOC

APPENDIX C

DEFINITIONS OF THE LIFE EFFECTIVENESS QUESTIONNAIRE FACTORS

(Order Used In Data Analysis - Arbitrary)

LEQ Dimensions	**Description**
Time Management	The extent that an individual perceives that he/she makes optimum use of time.
Social Competence	The degree of personal confidence and self-perceived ability in social interactions.
Achievement Motivation	The extent to which the individual is motivated to achieve excellence and put the required effort into action to attain it.
Intellectual Flexibility	The extent to which the individual perceives he/she can adapt his/her thinking and accommodate new information from changing conditions and different perspectives.
Task Leadership	The extent to which the individual perceives he/she can lead other people effectively when a task needs to be done and productivity is the primary requirement.
Emotional Control	The extent to which the individual perceives he/she maintains emotional control when he/she is faced with potentially stressful situations.
Active Initiative	The extent to which the individual likes to initiate action in new situations.
Self Confidence	The degree of confidence the individual has in his/her abilities and the success of their actions.

(Neill, 2007, p.1).

APPENDIX D

LEQ ITEMS BY FACTOR

TIME MANAGEMENT (TM)
01. I plan and use my time efficiently.
09. I do not waste time.
17. I manage the way I use my time well.

SOCIAL COMPETENCE (SO)
02. I am successful in social situations.
10. I am competent in social situations.
18. I communicate well with people.

ACHIEVEMENT MOTIVATION (AM)
03. When working on a project, I do my best to get the details right.
11. I try to get the best results when I do things.
19. I try to do the best that I possibly can.

INTELLECTUAL FLEXIBILITY (IF)
04. I change my thinking or opinions easily if there is a better idea.
12. I am open to new ideas.
20. I am adaptable and flexible in my thinking and ideas.

TASK LEADERSHIP (TL)
05. I can get people to work for me.
13. I am a good leader when a task needs to be done.
21. As a leader I motivate other people well when a task needs to be done.

EMOTIONAL CONTROL (EC)
06. I can stay calm in stressful situations.
14. I stay calm and overcome anxiety in new or changing situations.
22. I stay calm when things go wrong.

ACTIVE INITIATIVE (AI)
07. I like to be busy and actively involved in things.
15. I like to be active and energetic.
23. I like to be an active 'get into it' person.

SELF CONFIDENCE (SC)
08. I know I have the ability to do anything I want to do.
16. When I apply myself to something I am confident I will succeed.
24. I believe I can do it.

(Neill, 2007, p.1).

APPENDIX E

SHORT ANSWER SURVEY

Birthday (mm/dd/yyyy):_____

1. How many summers (including this one) have you worked at the summer camp where you are currently employed?:_____

2. How many total summers (including this one) have you worked at any summer camp(s)?:_____

3. How many summers have you worked specifically as a trail guide (canoe guide, backpacking guide, rock climbing guide, etc.)?:_____

4. How many summers have you worked specifically as an in-camp counselor?:_____

5. Did you have any positive experiences as an in-camp counselor or trail guide this summer? **Please Explain. Use the back of this survey if necessary.**

6. Did you have any negative experiences as an in-camp counselor or trail guide this summer? **Please Explain. Use the back of this survey if necessary.**

7. Have you noticed any changes in yourself over the course of this summer? **Please Explain. Use the back of this survey if necessary.**

8. Would you recommend to others summer employment working as either a trail guide or an in-camp counselor? **Please explain why or why not. Use the back of this survey if necessary.**

APPENDIX F

PERMISSION TO CONDUCT RESEARCH FROM VOYAGEURS LUTHERAN MINISTRY

VOYAGEURS
LUTHERAN MINISTRY

P.O. Box 1076, Cook, MN 55723 (218) 666-5465 (800) 331-5148 vlm@vlmcamps.org www.vlmcamps.org

CAMP HIAWATHA
On Deer Lake
Deer River, MN

Camp Vermilion
On Lake Vermilion
Cook, MN

Voyageurs Canoe Country
BWCA Wilderness
Northeastern MN

Joel Abenth
Executive Director

Julie Scheuring
Administrative Assistant

Joy Halstead
Interim Program Director

Patti Alt
Office Manager

Kevin Docken
Camp Hiawatha Site Director

Rick Scheuring
Camp Vermilion Site Director

4/28/2009

To Whom It May Concern:

I, Joy Halstead, Interim Program Director for Voyageurs Lutheran Ministry, understand that Cory Maria Dack is a graduate student at Southern Illinois University Carbondale, and that her proposed research and thesis is in partial fulfillment for her Masters degree of Science in Education with an emphasis in Outdoor Recreation. Voyageurs Lutheran Ministry grants Ms. Dack permission to conduct research for her thesis at Camp Vermilion and Camp Hiawatha during the summer of 2009.

Sincerely,

Joy Halstead

MA, LADC, BCC
Voyageurs Lutheran Ministry
Interim Program Director
PO Box 1076
Cook, MN. 55723
Cell: 218-780-4116
www.vlmcamps.org

Voyageurs Lutheran Ministry Provides Opportunities for Christ-centered Spiritual Growth, Leadership Development and Outreach in God's Great Northwood's

APPENDIX G

PERMISSION TO CONDUCT RESEARCH FROM YMCA CAMP MENOGYN

Y M C A
MENOGYN
WILDERNESS ADVENTURES

3425 Ihduhapi Rd, Loretto, MN 55357
Phone (612) 822-2267 Fax (612) 823-2482
info@campmenogyn.org www.Campmenogyn.org

Transformational experiences in a wilderness setting since 1922.

April 27th, 2009

To Whom It May Concern:

I, Maureen Martin, Program Director of YMCA Camp Menogyn, understand that Cory Maria Dack is a graduate student at Southern Illinois University Carbondale, and that her proposed research and thesis is in partial fulfillment for her Masters degree of Science in Education with an emphasis in Outdoor Recreation. I hereby give Ms. Dack permission to conduct research for her thesis at YMCA Camp Menogyn during the summer of 2009.

Sincerely,

Maureen Martin
Program Director

VITA

Graduate School
Southern Illinois University Carbondale

Cory Maria Dack Date of Birth: October 13, 1982

5959 Koski Road, Duluth, Minnesota 55804

corydack@yahoo.com

Cottey College
Associate of Arts, Music Theory and Composition, May 2003

Southern Illinois University Carbondale
Bachelor of Art, Music Open Studies, May 2008

Southern Illinois University Carbondale
Bachelor of Science, English Education with Speech Endorsement, May 2008

Thesis Title:
THE LIFE EFFECTIVENESS OF WILDERNESS ADVENTURE LEADERS

Major Professor: Dr. Whitney C. Ward